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**SEATTLE APPROACH CONTROL (S46) CONCURRENT OPERATIONS TO BOEING FIELD (BFI) AND SEATTLE-TACOMA INTERNATIONAL AIRPORT (SEA)**

The purpose of this Notice is to inform pilots landing/departing from either Boeing Field / King County International Airport (BFI) or Seattle-Tacoma International Airport (SEA) under instrument flight rules (IFR) concerning the special use of visual separation to maintain efficiency at both airports.

Sequencing aircraft simultaneously to BFI and SEA under IFR requires lateral and/or vertical separation between aircraft while ensuring protected airspace for potential missed approaches. These requirements directly affect the capacity of both airports.

BFI field elevation is 21 feet MSL and SEA field elevation is 433 feet MSL. BFI is located 4.5 nautical miles north of SEA. The convergence and divergence of flight paths has made it possible to utilize visual separation under certain weather conditions, which reduces the spacing normally provided to aircraft landing and departing SEA and BFI. In a south flow, the ILS approach to BFI Runway 14R/L converges with the ILS approaches to SEA Runways 16R/C/L directly over BFI. In a north flow, the departure paths for aircraft departing north at both airports diverge directly over the north end of BFI Runway 32L.

**INFORMATION:**

When weather/operational conditions permit, BFI Tower controllers will provide visual separation during the following operations:

**IFR arrivals to BFI Runways 14R/L and SEA arrivals Runways 16L/C/R**

**IFR departures from BFI Runways 32L/R and IFR departures from SEA Runways 34L/C/R**

When weather/operational conditions permit, SEA Tower controllers will provide visual separation during the following operations:

**IFR arrivals to BFI Runways 32L/R and IFR departures from SEA Runways 34L/C/R**

These procedures have proven to provide an equivalent level of safety compared to standard visual separation rules. The special use of visual separation procedures enables both airports to operate at or near capacity during periods of heavy demand.

If you have any questions or concerns, please contact the manager or designee of one of the facilities listed below during normal business hours.

Seattle Terminal Radar Approach Control : (206) 214-4600

Seattle Airport Traffic Control Tower: (206) 214-2500

Boeing Field Airport Traffic Control Tower: (206) 685-6400

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**VFR ADVISORY AREA**  
**Canadian Airspace**  
**VICTORIA-VANCOUVER**  
**(Effective: Until Further Notice)**

Effective 0901 UTC August 6, 1994, a VFR Advisory Area was permanently established between the two Canadian control zones, from above 1,200 MSL up to 2,500 MSL. Vancouver and Victoria Towers provide radar traffic information to all participating aircraft within the VFR Advisory Area.

**PROCEDURES****Victoria/Vancouver**

\*All aircraft operating between Victoria and Vancouver within the VFR Advisory Area should follow the routes shown on the graphic.

\***Northbound:** Change from Victoria Tower, 119.1, to Vancouver Tower, 124.0, when instructed by ATC.

\***Southbound:** Change from Vancouver Tower, 124.0, to Victoria Tower, 119.1, when instructed by ATC.

\*Set transponder codes as requested.

**TRANSITING TRAFFIC**

\*Call Vancouver Tower on 124.0 when north of the Active Pass/Samuel Island Line.

\*Call Victoria Tower on 119.1 when south of the Active Pass/Samuel Island Line.

\*Set Transponder codes as requested.

Routes and recommended altitudes will not be usable by all aircraft at all times because of weather and regulations pertaining to flight over water. Higher altitudes may be requested. If unable to maintain VFR, advise ATC.

**CONTINUED ON NEXT PAGE**

**VANCOUVER / VICTORIA**  
**VFR ADVISORY AREA**  
 ABOVE 1200' to 2500'  
 Modifications to  
 VANCOUVER VTA CHART  
 19th EDITION

0 NM 5 NM  
 VFR  
 Advisory Area  
 Boundary

**VANCOUVER**  
 ATIS 114.8 124.6  
 TWR 124.0 (OUTER) 118.7 (INNER) 128.6 226.5 236.6  
 GND 121.7 275.8

**SANDHEADS**  
 N49 06.4  
 W123 18.2

**307 G**  
 157°

**SOUTHBOUND ROUTE**  
 RECOMMENDED ALT  
 2000

**115.9 YVR**  
 Ch 106

**VOR**  
 N49 04.6  
 W123 08.9

**25**  
**VANCOUVER**  
 TWR 124.0  
**ABV 12**  
 12  
**NO CONTACT**  
 SFC  
**N48 54.6**  
**W123 17.5**

**210°**  
**COAL PILE**  
 N49 00.9  
 W123 09.8

**49° 00'**

**CONTACT VANCOUVER**

**25**  
**VICTORIA**  
 TWR 119.1  
**ABV 12**  
 12  
**NO CONTACT**  
 SFC  
**N48 46.4**  
**W123 22.3**

**378 AP**  
**349°**

**ACTIVE PASS**  
 Mayne I.

**CONTACT VICTORIA**

**SAMUEL ISLAND**  
 N48 49.7  
 W123 12.7

**BEAVER POINT**  
 N48 46.4  
 W123 22.3

**113.7 YYJ**  
 DME Ch 84

**180°**  
**007°**

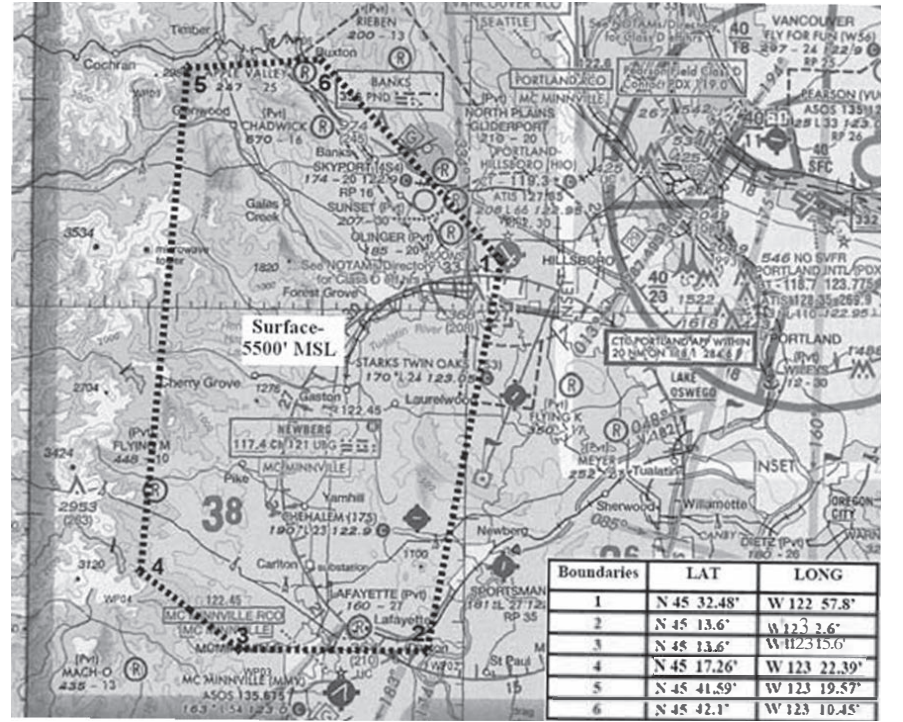
**MORESBY**  
 N48 43.3  
 W123 17.8

**NORTHBOUND ROUTE**  
 RECOMMENDED ALT  
 1500

**VICTORIA**  
 ATIS 118.8  
 TWR 119.1 (OUTER) 119.7 (INNER) 239.6  
 GND 121.9 361.4  
 ATF 119.7

INTENSIVE FLIGHT TRAINING IN VICINITY OF  
PORTLAND-HILLSBORO AIRPORT  
HILLSBORO, OR

Intensive flight training activity in areas S to NW of the Portland-Hillsboro Airport within 25 NM at or below 5500 MSL. These areas are in use from sunrise to sunset daily. Participating aircraft reports on 122.75.



### ADVISORY FOR SW TO NW VFR DEPARTURES ASHLAND, OR

Use caution when departing Ashland Municipal Airport (S03) on a SW to NW heading when aircraft are arriving Runway 32 at Medford Airport (MFR). This scenario often puts aircraft in direct conflict creating a safety concern for the National Airspace System. Many aircraft are overflying Interstate 5 to take advantage of the valley. This makes the airspace over Ashland Airport congested and potentially dangerous. Prior to departure, S03 pilots are encouraged to monitor MFR ATIS on frequency 127.25. When Medford Runway 32 is in use, Ashland departures could be in close proximity to MFR arrivals. If conditions allow, depart on runway heading or remain east of I-5 and contact Cascade Approach on 124.3 for traffic advisories.

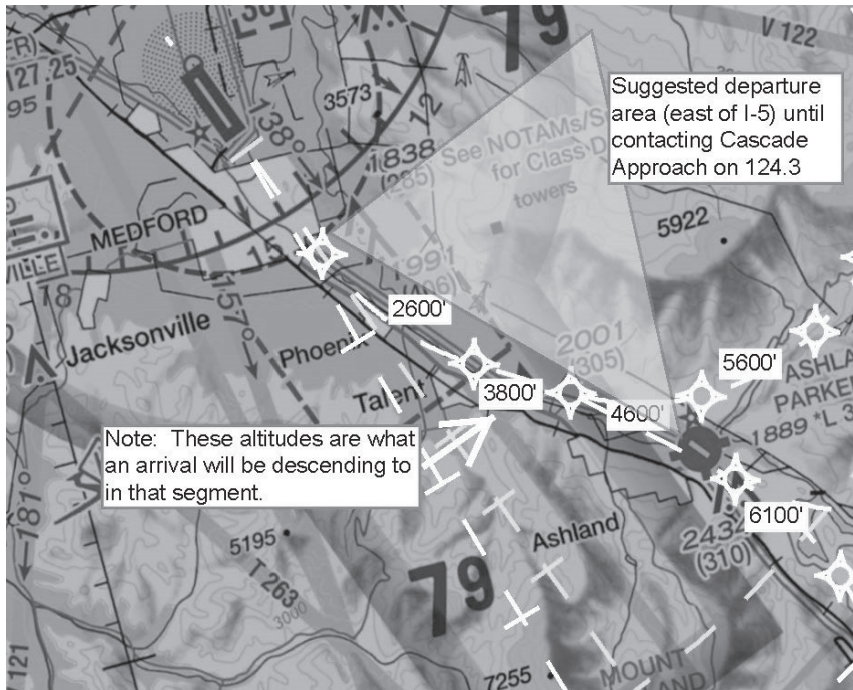
Frequencies: CASCADE APPROACH 124.3, MFR ATIS 127.25, MFR TOWER 119.4

Suggested best practices:

- o Monitor MFR ATIS for runway in use.
- o Use caution if RWY 32 is in use at MFR.
- o S03 departures, flying SW to NW recommend runway heading or east of I-5 and contact Cascade Approach for traffic advisories
- o Avoid flying directly over the interstate. Suggest offsetting a mile or more to the east.
- o Maintain VFR

For inquiries ctc Cascade Approach Control 541-482-7675

Effective 22 APR 2021 to 15 JUN 2023





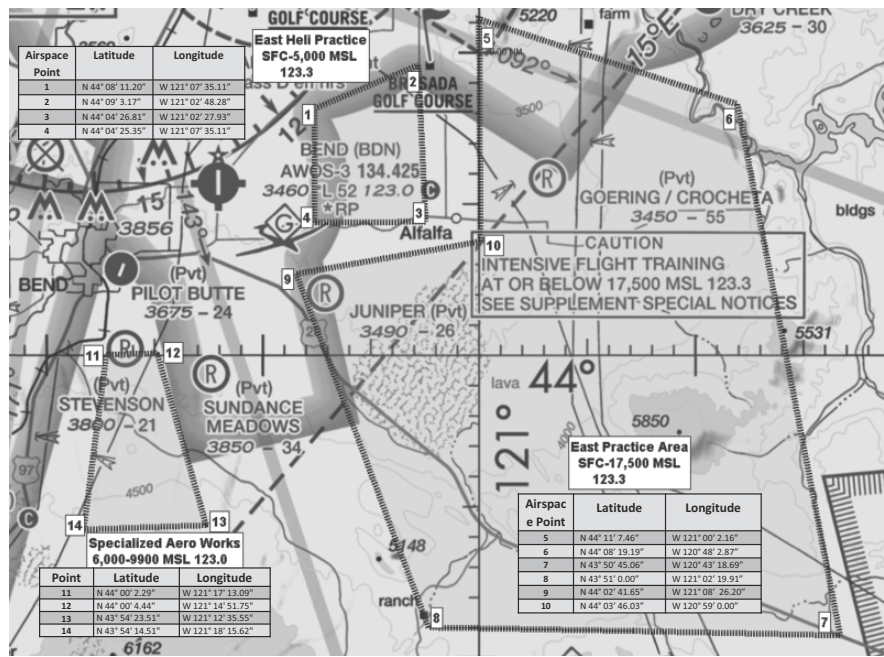
INTENSIVE FLIGHT TRAINING IN THE VICINITY OF  
BEND AIRPORT,  
BEND, OR

“East Heli Practice” area: Intensive helicopter flight training activity in the area east of Bend Airport from the surface to 5,000 MSL. Participating aircraft report on 123.3.

“East Practice Area”: Intensive small aircraft and helicopter flight training activity east and south of the Bend airport within 25 NM from the surface to 10,000 MSL. Turbine instruction and flight testing in vicinity of the East Practice Area from 10,000 to 17,500 MSL. These areas are in use from sunrise to sunset daily. Participating aircraft reports on 123.3.

“Specialized Aero Works” area: Aerobatic training 6,000-10,000 MSL. Participating aircraft reports on 123.0.

Office of Primary Responsibility: Seattle ARTCC Airspace and Procedures 253-351-3558.

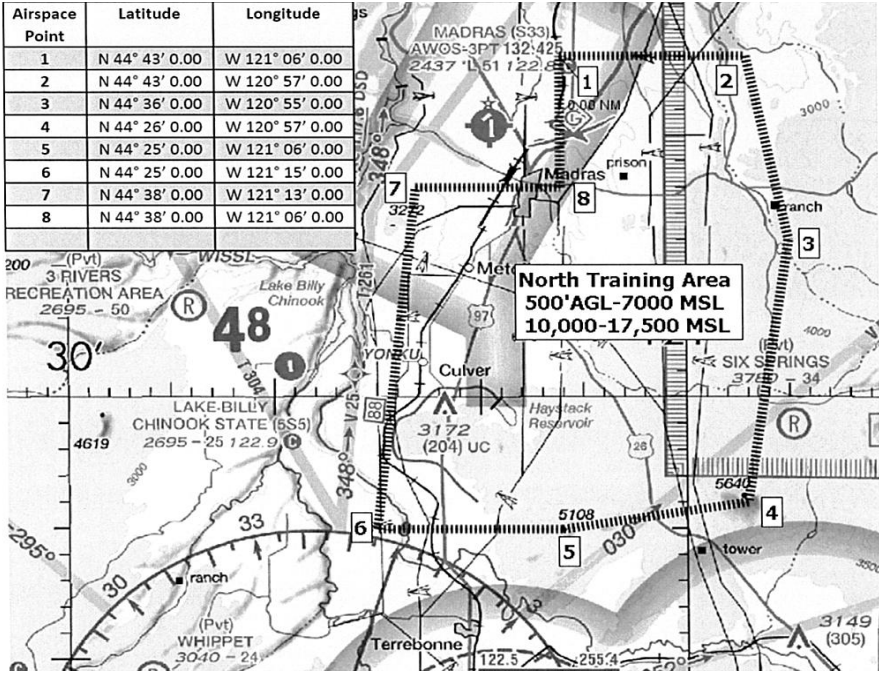


INTENSIVE FLIGHT TRAINING IN THE VICINITY OF  
MADRAS AIRPORT,  
MADRAS, OR

Intensive small aircraft flight training activity in the area south and east of the Madras Airport within 17 NM at or below 7,000 MSL. Turbine instruction and flight testing in vicinity of the North Practice Area primarily from 10,000 to 17,500 MSL. These areas are in use from sunrise to sunset daily. Participating aircraft reports on 123.5.

Office of Primary Responsibility: Seattle ARTCC Airspace and Procedures 253-351-3558.

Airspace Point	Latitude	Longitude
1	N 44° 43' 0.00	W 121° 06' 0.00
2	N 44° 43' 0.00	W 120° 57' 0.00
3	N 44° 36' 0.00	W 120° 55' 0.00
4	N 44° 26' 0.00	W 120° 57' 0.00
5	N 44° 25' 0.00	W 121° 06' 0.00
6	N 44° 25' 0.00	W 121° 15' 0.00
7	N 44° 38' 0.00	W 121° 13' 0.00
8	N 44° 38' 0.00	W 121° 06' 0.00



**Special Flight Rules Area  
Pearson Field Airport (VUO)  
Vancouver, Washington**

Pearson advisory service is provided by Portland Tower (PDX) on frequency 119.0. The purpose of the advisory service is to provide traffic advisories to pilots operating to/from Pearson Field. "Pearson Advisory" does not control VFR aircraft on Pearson Field or in the SFRA. However, pilots are required to establish and maintain communications with Pearson Advisory on 119.0.

Pilots should exercise caution when arriving and departing VUO due to the close proximity of Portland International Airport (PDX)

Aircraft Operations – FAR 93.163 Regulatory Information

1. Obtain the weather (ASOS 135.125) prior to contacting Pearson Advisory.
2. Establish two-way radio contact with Pearson Advisory on 119.0:
  - a. Inbound to Pearson Field (or transitioning through SFRA) – before entering SFRA (see chart below).
  - b. Departing Pearson Field- prior to taxiing onto the runway.
3. After initial contact, continue to monitor 119.0 while in the SFRA.
4. Remain outside Portland Class C airspace.
5. Make a right traffic pattern when operating to/from Pearson Field Runway 26.
6. When operating over the runway or extended runway centerline of Pearson Field Runway 8/26 maintain an altitude at or below 700 feet above mean sea level.
7. Two-way communications failure in flight-
  - a. VFR aircraft – if ASOS indicates VFR conditions, continue inbound and land
  - b. IFR aircraft – comply with FAR 91.185

VUO Airport Recommended Procedures

Departing pilots: After receiving weather and ready to depart, contact Pearson Advisory. Advise you have the weather and your intentions:

**Example:** "Pearson Advisory, N6776G at runway eight, departing northwest bound with the Pearson weather."

IFR Pilots: Use Pearson Advisory 119.0 to request clearance and IFR release from VUO.

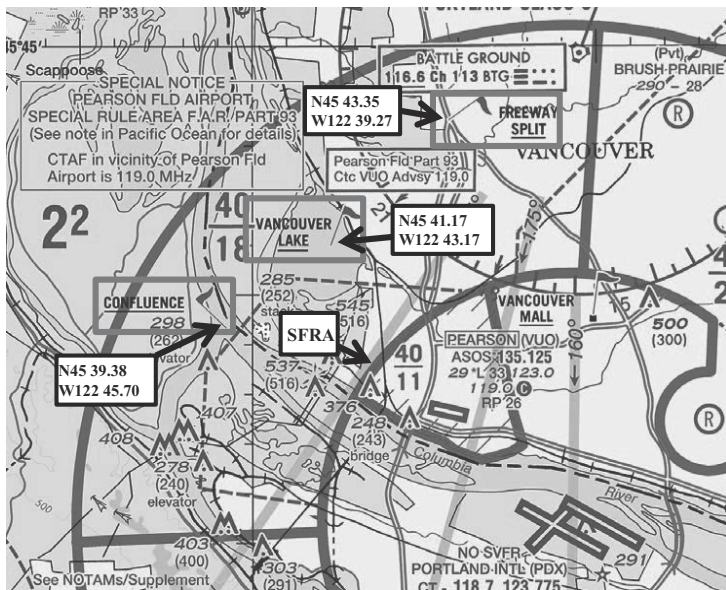
Arriving Pilots: After receiving weather, contact Pearson Advisory at least five miles from VUO with your position and intentions.

**Example:** "Pearson Advisory, N993MM over Vancouver Lake, inbound runway eight with the Pearson weather."

The geographical reporting points of Vancouver Lake, the Freeway Split, and the Confluence are commonly used (see attached chart). Pilots can expect Pearson Advisory to issue traffic and wake turbulence advisories on PDX traffic and instruction to remain outside Portland Class C airspace. Pilots can also expect to be advised of the current direction of the PDX traffic flow and should when safe, operate in the same direction as the PDX flow.

After initial contact with Pearson Advisory, pilots should resume broadcasting their position and intentions on CTAF (119.0) as they would at any uncontrolled airport.

**Example** – "Pearson traffic, Experimental 18LM turning base runway eight."



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**CONTROLLED FIRING**  
**Fort Harrison Controlled Firing Area**  
**Helena, Montana**

Controlled firing occurs in the vicinity of the Helena, Montana VORTAC (HLN) 24 hours daily, 5'800 MSL and BELOW. The area defined by the following radial/DME coordinates HLN258008, HLN258005, HLN250008, HLN250005.

**Limestone Hills Controlled Firing Area**  
**Helena, Montana**

Controlled firing occurs in the vicinity of the Helena, Montana VORTAC (HLN) 24 hours daily, FL180 and BELOW. The area defined by the following radial/DME coordinates HLN125026, HLN127028, HLN140025, HLN125028.

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**SPECIAL NORTH ATLANTIC, CARIBBEAN AND  
PACIFIC AREA COMMUNICATIONS**

VHF air-to-air frequencies enable aircraft engaged in flights over remote and oceanic areas out of range of VHF ground stations to exchange necessary operational information and to facilitate the resolution of operational problems.

Frequencies have been designated as follows:

North Atlantic area:	123.45 MHz
Caribbean area:	123.45 MHz
Pacific area:	123.45 MHz

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**MOUNT ST. HELENS NATIONAL VOLCANIC MONUMENT, WASHINGTON**

The U.S. Geological Survey (USGS) and the U.S. Forest Service (USFS) conduct low level flights to and from monitor station within the monument and within the crater itself. Due to this activity, the volatility of the volcano and a high volume of sightseeing flights in the area, the following procedures are recommended in the interest of flying safety.

1. VFR aircraft are encouraged to transmit an initial position report on 122.75 MHz in the blind when flying at altitudes of less than 10,000 feet MSL within 10 nautical miles of the Mount St. Helens volcano crater.
  2. VFR flight below 3000 feet AGL – strongly not recommended.
  3. VFR flight above 3000 feet AGL – fly a counterclockwise pattern, no closer than 3 miles to the volcano summit.
- VFR rules of “see and be seen” and good airmanship practices will prevail. Approval to land can only be obtained through appropriate Federal or State authority. Any significant information will be available on the Portland and Seattle ATIS. Marginal radar coverage limits Seattle Center's ability to provide radar flight following to aircraft in orbit of the volcano.

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**DEVILS TOWER NATIONAL MONUMENT, WYOMING**

For reasons of national welfare, pilots are requested to avoid flights within 3 nautical miles of Devils Tower National Monument.

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**BIRD HAZARD OREGON AND WASHINGTON**

Heavy concentration of migratory and wintering flocks of large waterfowl from the Canadian to California borders annually November to May. Caution advised at all airports or while transiting area.

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**SEATTLE-TACOMA INTL**  
**SEATTLE, WASHINGTON**

**Gatehold Procedures:**

During peak departure periods, gatehold procedures are implemented for all IFR departures. Additional information will be broadcast on ATIS.

**Oceanic Departures:**

1. Contact Clearance Delivery only when you will be ready to taxi within ten minutes. State destination, requested altitude, “ten minutes to taxi.”
2. If ATC delays are more than 15 minutes for your filed altitude/route, alternatives with less delay will be offered.
3. Failure to depart the gate within ten minutes or reach the runway at the release time specified in the IFR clearance may result in the cancellation of your clearance.

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**MOUNTAIN HOME, IDAHO**

All aircraft operating within 25 NM southwest of V-4, V-330, and V-253 are requested to contact Mountain Home approach on 124.8 for traffic advisories due to intensive military training in the Mountain Home Area.

For further information contact Mountain Home RAPCON 208-828-6069.

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**MILITARY TRAINING ROUTES**

The DOD Flight Information Publication AP/1B provides textual and graphic descriptions and operating instructions for all military training routes (IR, VR, SR) and refueling tracks/anchors. Complete and more comprehensive information relative to policy and procedures for IRs and VRs is published in FAA Handbook 7610.4 (Special Military Operations) which is agreed to by the DOD and therefore directive for all military flight operations. The AP/1B is the official source of route data for military users.

**CIVIL USE OF MILITARY FIELDS:**

U.S. Army, Air Force, Navy and Coast Guard Fields are open to civil fliers only in emergency or with prior permission.

Army installations, prior permission is required from the Commanding Officer of the installation.

For Air Force installations, prior permission should be requested at least 30 days prior to first intended landing from either Headquarters USAF (PRPOC) or the Commander of the installation concerned (who has authority to approve landing rights for certain categories of civil aircraft). For use of more than one Air Force installation, requests should be forwarded direct to Hq USAF (PRPOC), Washington, D.C. 20330.

Use of USAF installations must be specifically justified.

For Navy and Marine Corps installations, prior permission should be requested at least 30 days prior to first intended landing. An Aviation Facility License must be approved and executed by the Navy prior to any landing by civil aircraft.

Forms and further information may be obtained from the nearest U.S. Navy or Marine Corps aviation activity.

For Coast Guard fields prior permission should be requested from the Commandant, U.S. Coast Guard via the Commanding Officer of the field.

When instrument approaches are conducted by civil aircraft at military airports, they shall be conducted in accordance with the procedures and minimums approved by the military agency having jurisdiction over the airport.

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**AIRCRAFT LANDING RESTRICTIONS**

Landing of aircraft at locations other than public use airports may be a violation of Federal or local law. All land and water areas are owned or controlled by private individuals or organizations, states, cities, local governments, or U.S. Government agencies. Except in emergency, prior permission should be obtained before landing at any location that is not a designated public use airport or seaplane base.

Landing of aircraft is prohibited on lands or water administered by the National Park Service, U.S. Fish and Wildlife Service, U.S. Forest Service, and on many areas controlled by the U.S. Army Corps of Engineers, unless prior authorization is obtained from the respective agency.

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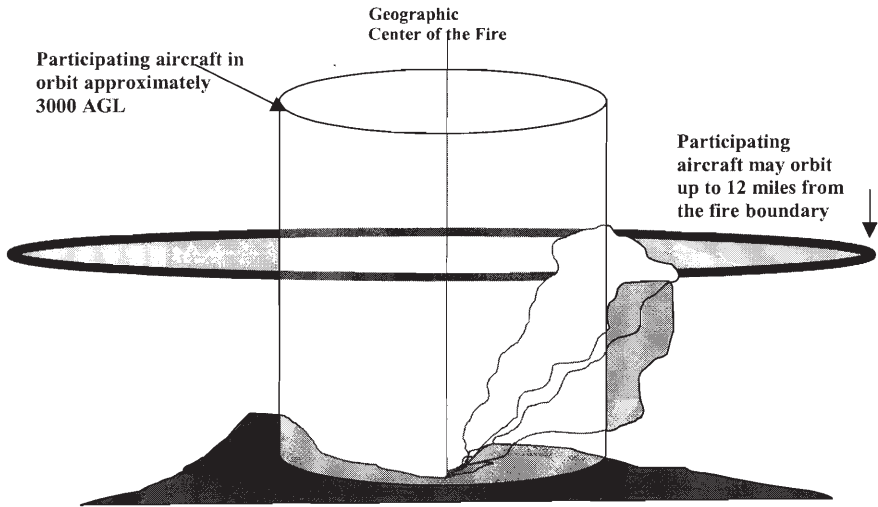
**Night Vision Lights Out Operations****Hays MOA, Montana**

Lights-out night vision goggle training operations conducted within the Hays MOA at all altitudes from sunset to sunrise when MOA is active by NOTAM. Contact Salt Lake City ARTCC on 133.4 or 119.75 or check the Federal NOTAM System (FNS) website (<https://notams.aim.faa.gov/notamSearch/>) or contact Flight Service for schedule and NOTAM information.

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## FIREFIGHTING TRAFFIC AREAS



Pilots are advised to stay clear of Firefighting Traffic Areas. Remain 15 miles from the area of activity. If you must over-fly the area, do so at an altitude of 5000 feet AGL above. However, to remain safe and out of the way of working aircraft, it is best to circumnavigate the area.

The wild-land fire environment can be very complex and involve a large number and variety of aircraft types including fixed and rotary wing aircraft. Some of the aircraft are small single and multi-engine command and control platforms that can be especially difficult to see and may give the appearance that the fire is not staffed. The aircraft participating in firefighting can orbit as far out as 12 miles from the perimeter of the fire. Any intrusion by aircraft not directly involved in the firefighting operation could delay the delivery of much needed retardant or water to ground firefighters and will adversely affect the safety of participating aircraft. Please stay well away from wild-land fires even if you feel that aircraft are not working the fire; they may be en route or unseen.

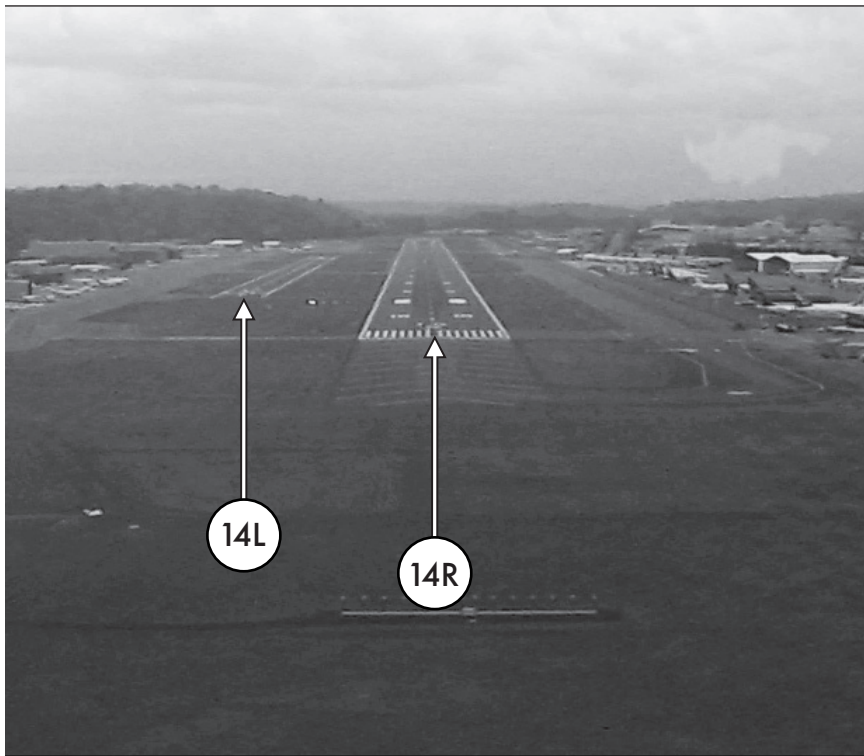
If you see a fire developing along your route, report it immediately to air traffic control who will advise the US Forest Service. The firefighting community would welcome this information.

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## BOEING FIELD/KING COUNTY INTERNATIONAL AIRPORT (BFI) ARRIVAL ALERT

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### Landing Southeast RWY 14L and RWY 14R



#### Off-set Parallels.

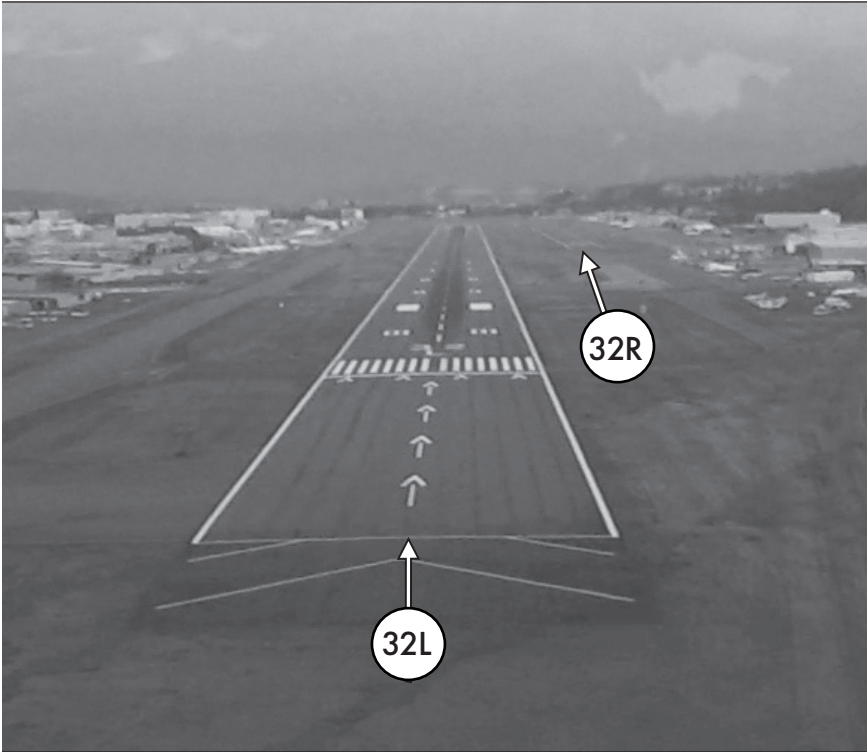
Pilots be aware that RWY 14L displaced threshold  
is approximately 1522 feet farther down the  
approach than RWY 14R.

**Not for Navigational Purposes  
For Situational Awareness Only**

## BOEING FIELD/KING COUNTY INTERNATIONAL AIRPORT (BFI) ARRIVAL ALERT

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### Landing Northwest RWY 32L and RWY 32R



#### Off-set Parallels.

Pilots be aware that RWY 32R displaced threshold is approximately 4527 feet farther down the approach than RWY 32L displaced threshold.

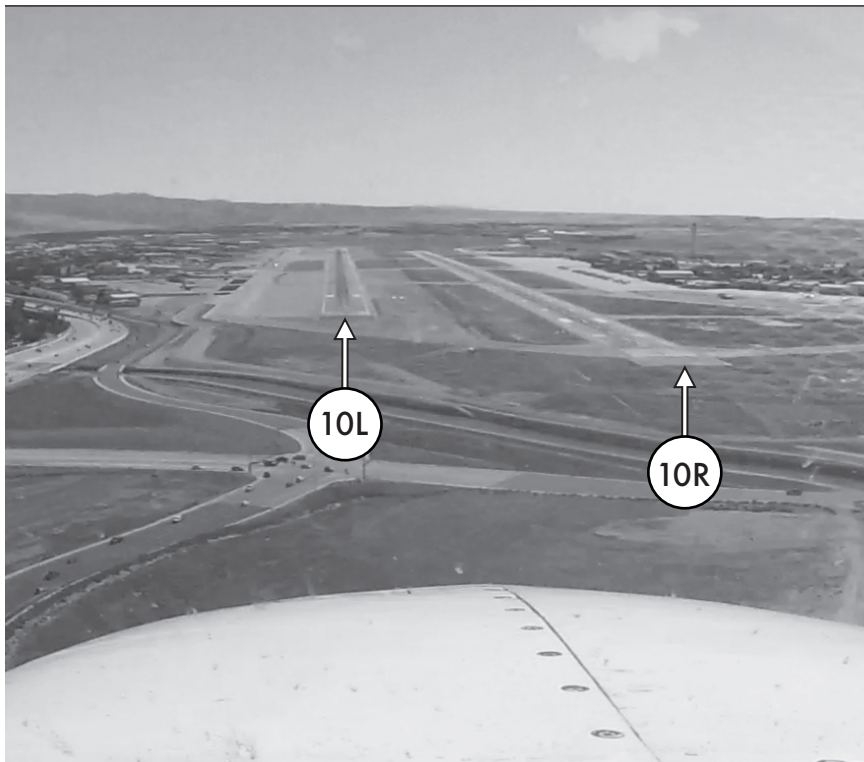
**Not for Navigational Purposes  
For Situational Awareness Only**

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## BOISE AIR TERMINAL/GOWEN FIELD AIRPORT (BOI) ARRIVAL ALERT

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### Landing East RWY 10L and RWY 10R



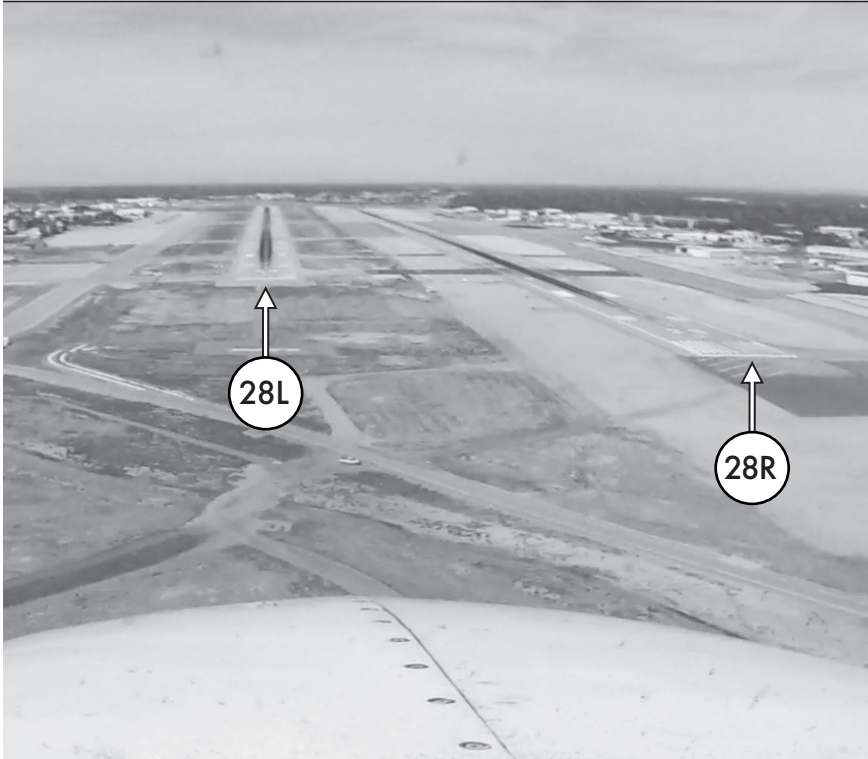
**Use caution for closely aligned parallel  
runways with offset thresholds.**

**Not for Navigational Purposes  
For Situational Awareness Only**

# BOISE AIR TERMINAL/GOWEN FIELD AIRPORT (BOI) ARRIVAL ALERT

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## Landing West RWY 28L AND RWY 28R



**Use caution for closely aligned  
parallel runways with offset thresholds.**

**Not for Navigational Purposes  
For Situational Awareness Only**



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## IDAHO FALLS RGNL (IDA) ARRIVAL ALERT

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### Landing Southwest RWY 17 and RWY 21



**Pilots confuse RWY 17 for RWY 21.**

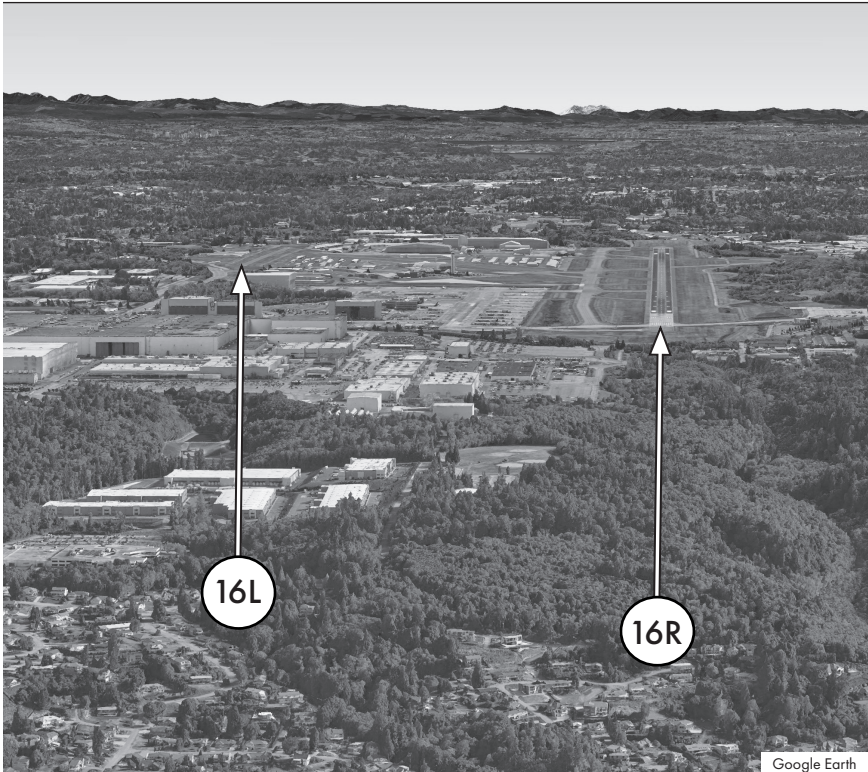
**Not for Navigational Purposes  
For Situational Awareness Only**

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## PAINE FIELD AIRPORT (PAE) ARRIVAL ALERT

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### Landing Southeast RWY 16L and RWY 16R



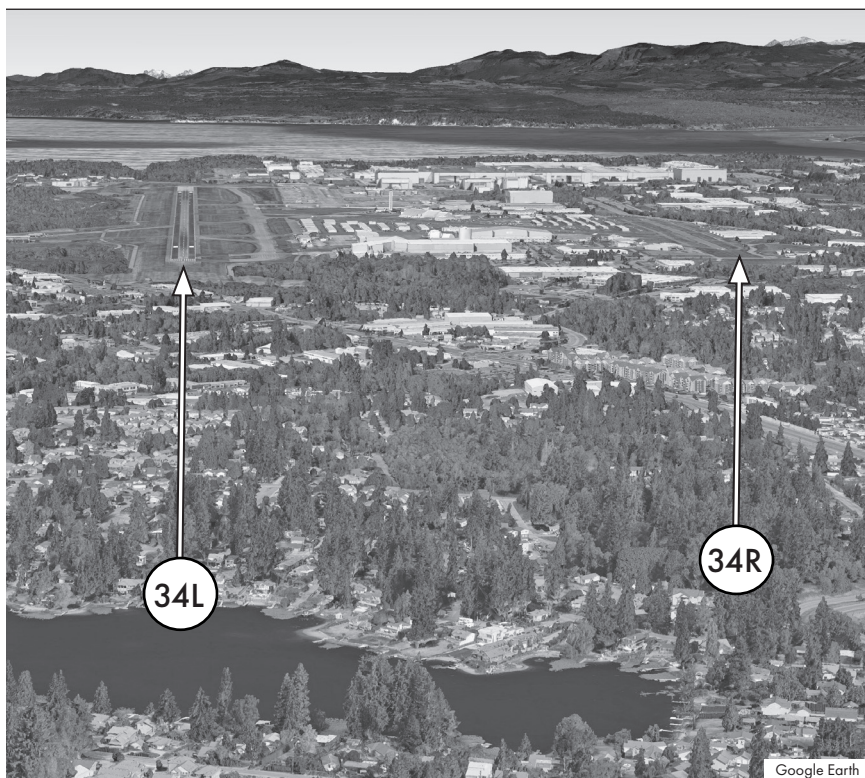
Offset parallels. Pilots be aware that RWY16L is approximately 5,600 feet farther down the approach than RWY 16R and is located approximately 3,350 feet from RWY centerline to RWY centerline.

**Not for Navigational Purposes  
For Situational Awareness Only**

## PAINE FIELD AIRPORT (PAE) ARRIVAL ALERT

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### Landing North RWY 34L and RWY 34R



Offset parallels. Pilots be aware that RWY 34R is approximately 570 feet farther down the approach than RWY 34L and is located approximately 3,350 feet from RWY 34L centerline to RWY 34R centerline.

**Not for Navigational Purposes  
For Situational Awareness Only**

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## PORTLAND-HILLSBORO AIRPORT AIRPORT (HIO) ARRIVAL ALERT

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### Landing Southeast RWY 13L and RWY 13R



**Off-set Parallels. Pilots be aware that  
RWY 13L is approximately 250 feet farther  
down the approach than RWY 13R.**

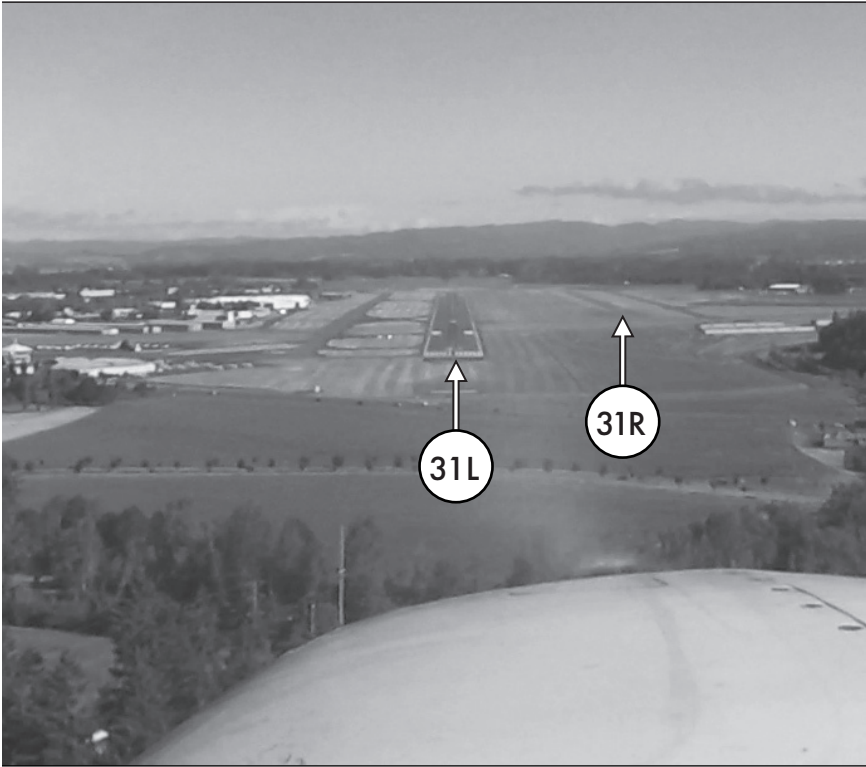
**Not for Navigational Purposes  
For Situational Awareness Only**



# PORTLAND-HILLSBORO AIRPORT AIRPORT (HIO) ARRIVAL ALERT

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## Landing Northwest RWY 31R and RWY 31L



**Off-set Parallels. Pilots be aware that  
RWY 31R is approximately 2750 feet  
farther down the approach than RWY 31L.**

**Not for Navigational Purposes  
For Situational Awareness Only**



The following narratives summarize the FAR Part 93 Special Air Traffic Rules, and Airport Traffic Patterns in effect as prescribed in the rule. This information is advisory in nature and in no way relieves the pilot from compliance with the specific rules set forth in FAR Parts 91 and 93.

Special Airport Traffic Areas prescribed in Part 93 are depicted on Sectional Aeronautical Charts, Enroute Low Altitude Charts, and where applicable, on VFR Terminal Area Charts.

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## **OPERATIONS RESERVATIONS FOR HIGH DENSITY TRAFFIC AIRPORTS**

### **Kennedy, LaGuardia, and Washington Reagan National**

The Federal Aviation Administration (FAA) has designated New York's Kennedy and LaGuardia Airports and Washington Reagan National Airport as High Density Traffic Airports (HDTA), Title 14, Code of Federal Regulations, part 93, subpart K, and has prescribed air traffic rules and requirements for operating aircraft (excluding helicopters) to and from those airports during certain hours.

Reservations are required for operations from 6 a.m. through 11:59 p.m. local time at LaGuardia Airport and Washington Reagan National Airport. Reservations at Kennedy Airport are required from 3 p.m. through 7:59 p.m. local time.

Reservation procedures are detailed in Advisory Circular 93-1, Reservations for Unscheduled Operations at High Density Traffic Airports. A copy of the advisory circular is available on the FAA website at <http://www.faa.gov>. Reservations for unscheduled operations are allocated through the Enhanced Computer Voice Reservation System (e-CVRS) accessible via telephone or the Internet. This system may not be used to make reservations for scheduled air carrier or commuter flights.

The toll-free telephone number for accessing e-CVRS is 1-800-875-9694 and is available for calls originating within the United States, Canada, and the Caribbean. Users outside the toll-free areas may access e-CVRS by calling the toll number of 703-707-0568. The Internet web address for accessing the e-CVRS is <http://www.fly.faa.gov/ecvrs>. If you have any questions about reservation requirements or are experiencing problems with the system, you may telephone the Airport Reservation Office at the Air Traffic Control System Command Center at (703) 904-4452.

Requests for instrument flight rules (IFR) reservations will be accepted beginning 72 hours prior to the proposed time of operation at the high-density airport. For example, a request for an 11 a.m. reservation on a Thursday will be accepted beginning at 11 a.m. on the previous Monday.

IFR reservations must be obtained prior to IFR landing or takeoff at an HDTA during slot controlled hours. An air traffic control (ATC) clearance does not constitute a reservation. A reservation does not constitute permission to operate at an HDTA if additional operational limits or procedures are required by NOTAM and/or regulation.

Aircraft involved in medical emergencies will be handled by ATC without regard to a reservation after obtaining prior approval of the ATC System Command Center on (703) 904-4452. ATC will accommodate declared other emergency situations without regard to slot reservations.

**NOTE:** Visual flight rule (VFR) reservations via ATC for unscheduled operations at LaGuardia are not authorized from 7 a.m. through 8:59 a.m. local time and 4 p.m. through 6:59 p.m. local time, Monday through Friday and Sunday evenings, unless otherwise announced by NOTAM. Both IFR and VFR operations during those time periods must obtain an advance reservation through e-CVRS.

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FSS  
TELEPHONE NUMBERS

**Flight Service Station (FSS)** facilities process flight plans and provide flight planning and weather briefing services to pilots. FSS services in the contiguous United States, Hawaii and Puerto Rico, are provided by a contract provider at two large facilities. In Alaska, FSS services are delivered through a network of three hub facilities and 14 satellite facilities, some of which operate part-time and some are seasonal. Because of the interconnectivity between the facilities, all FSS services including radio frequencies are available continuously using published data.

Further information can be found in the Aeronautical Information Manual (AIM).

NATIONAL FSS TELEPHONE NUMBER

Pilot Weather Briefings ..... 1-800-WX-BRIEF (1-800-992-7433)

OTHER FSS TELEPHONE NUMBERS (except in Alaska)

Medevac Flights Only ..... 1-877-LIF-GRD3 (1-877-543-4733)

FLIGHT RESTRICTED ZONE FLIGHTS

Pilots wishing to fly within the Flight Restricted Zone (FRZ) must call the Washington ARTCC Flight Data Unit at 703-771-3476.

FAA TELEPHONE NUMBERS AND NWS  
KEY AIR TRAFFIC FACILITIES

Air Traffic Control System Command Center  
Main Number.....540-422-4100

AIR ROUTE TRAFFIC CONTROL CENTERS (ARTCCs)

ARTCC NAME	*24 HR RGNL DUTY OFFICE TELEPHONE #	BUSINESS HOURS	BUSINESS TELEPHONE #	**CLEARANCE DELIVERY TELEPHONE #
Albuquerque	817-222-5006	7:30 a.m.-4:00 p.m.	505-856-4300	505-856-4561
Anchorage	907-271-5936	7:30 a.m.-4:00 p.m.	907-269-1137	
Atlanta	404-305-5180	7:30 a.m.-5:00 p.m.	770-210-7601	770-210-7692
Boston	404-305-5156	7:30 a.m.-4:00 p.m.	603-879-6633	603-879-6859
Chicago	817-222-5006	8:00 a.m.-4:00 p.m.	630-906-8221	630-906-8921
Cleveland	817-222-5006	8:00 a.m.-4:00 p.m.	440-774-0310	440-774-0490
Denver	206-231-2099	7:30 a.m.-4:00 p.m.	303-342-1600	303-651-4257
Ft. Worth	817-222-5006	7:30 a.m.-4:00 p.m.	817-858-7500	817-858-7584
Honolulu	310-725-3300	7:30 a.m.-4:00 p.m.	808-840-6100	808-840-6201
Houston	817-222-5006	7:30 a.m.-4:00 p.m.	281-230-5300	281-230-5622
Indianapolis	817-222-5006	8:00 a.m.-4:00 p.m.	317-247-2231	317-247-2411
Jacksonville	404-305-5180	8:00 a.m.-4:30 p.m.	904-549-1501	904-845-1592
Kansas City	817-222-5006	7:30 a.m.-4:00 p.m.	913-254-8500	913-254-8508
Los Angeles	661-265-8200	7:30 a.m.-4:00 p.m.	661-265-8200	661-575-2079
Memphis	404-305-5180	7:30 a.m.-4:00 p.m.	901-368-8103	901-368-8453
Miami	404-305-5180	7:00 a.m.-3:30 p.m.	305-716-1500	305-716-1731
Minneapolis	817-222-5006	8:00 a.m.-4:00 p.m.	651-463-5580	651-463-5588
New York	718-995-5426	8:00 a.m.-4:40 p.m.	631-468-1001	631-468-1425
Oakland	310-725-3300	6:30 a.m.-3:00 p.m.	510-745-3331	
Salt Lake City	206-231-2099	7:30 a.m.-4:00 p.m.	801-320-2500	801-320-2568
San Juan	404-305-5180	7:30 a.m.-5:00 p.m.	787-253-8663	787-253-8664
Seattle	206-231-2099	7:30 a.m.-4:00 p.m.	253-351-3500	253-351-3694
Washington	718-995-5426	8:00 a.m.-4:30 p.m.	703-771-3401	703-771-3587

\*Facilities can be contacted through the Rgnl Duty Officer during non-business hours.

\*\*For use when numbers or frequencies are not listed in the airport listing

MAJOR TERMINAL RADAR APPROACH CONTROLS (TRACONs)

TRACON NAME	*24 HR RGNL DUTY OFFICE TELEPHONE #	BUSINESS HOURS	BUSINESS TELEPHONE #
Atlanta	678-364-6131	7:00 a.m.-3:30 p.m.	678-364-6000
Chicago	817-222-5006	8:00 a.m.-4:00 p.m.	847-608-5509
Dallas-Ft. Worth	817-222-5006	7:30 a.m.-4:00 p.m.	972-615-2500
Denver	425-227-1389	7:30 a.m.-4:00 p.m.	303-342-1500
Houston	817-222-5006	7:30 a.m.-4:00 p.m.	281-230-8400
New York	718-995-5426	8:00 a.m.-4:30 p.m.	516-683-2901
Northern CA	310-725-3300	7:00 a.m.-3:30 p.m.	916-366-4001
Potomac	718-995-5426	8:00 a.m.-4:30 p.m.	540-349-7500
Southern CA	310-725-3300	7:30 a.m.-4:00 p.m.	858-537-5800

\*Facilities can be contacted through the Rgnl Duty Officer during non-business hours.

# FAA TELEPHONE NUMBERS AND NWS KEY AIR TRAFFIC FACILITIES

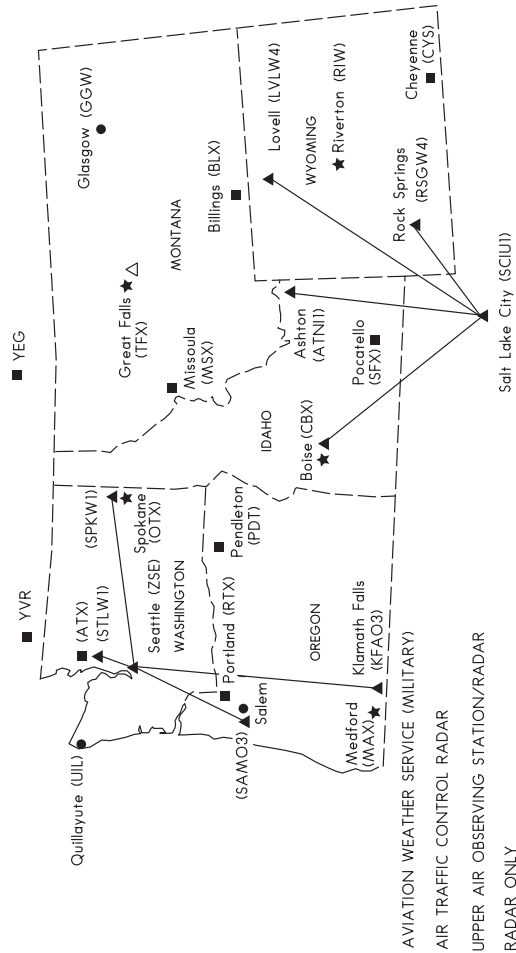
## DAILY NAS REPORTABLE AIRPORTS

AIRPORT NAME	*24 HR RGNL DUTY OFFICE TELEPHONE #	BUSINESS HOURS	BUSINESS TELEPHONE #
Albuquerque Intl Sunport, NM	817-222-5006	8:00 a.m.-5:00 p.m.	505-842-4366
Andrews AFB, MD	718-995-5426	8:00 a.m.-4:30 p.m.	301-735-2380
Baltimore/Washington Intl Thurgood Marshall, MD	718-995-5426	8:00 a.m.-4:30 p.m.	410-962-3555
Boston Logan Intl, MA	404-305-5156	7:30 a.m.-4:00 p.m.	617-455-3100
Bradley Intl, CT	404-305-5156	7:30 a.m.-4:00 p.m.	203-627-3428
Burbank/Bob Hope, CA	310-725-3300	7:00 a.m.-5:30 p.m.	818-567-4806
Charlotte Douglas Intl, NC	404-305-5180	8:00 a.m.-4:30 p.m.	704-344-6487
Chicago Midway, IL	817-222-5006	8:00 a.m.-4:00 p.m.	773-884-3670
Chicago O'Hare Intl, IL	817-222-5006	8:00 a.m.-4:00 p.m.	773-601-7600
Cleveland Hopkins Intl, OH	817-222-5006	8:00 a.m.-4:00 p.m.	216-352-2000
Covington/Cincinnati, OH	817-222-5006	8:00 a.m.-4:30 p.m.	859-372-6440
Dallas-Ft. Worth Intl, TX	817-222-5006	8:30 a.m.-5:00 p.m.	972-615-2531
Dayton Cox Intl, OH	817-222-5006	7:30 a.m.-4:00 p.m.	937-415-6800
Denver Intl, CO	425-227-1389	7:30 a.m.-4:00 p.m.	303-342-1600
Detroit Metro, MI	817-222-5006	8:00 a.m.-4:00 p.m.	734-955-5000
Fairbanks Intl, AK	907-271-5936	7:30 a.m.-4:00 p.m.	907-474-0050
Fort Lauderdale Intl, FL	404-305-5180	7:00 a.m.-3:30 p.m.	305-356-7932
George Bush Intercontinental/Houston, TX	817-222-5006	7:30 a.m.-4:00 p.m.	713-230-8400
Hartsfield-Jackson Atlanta Intl, GA	678-364-6131	7:00 a.m.-3:30 p.m.	404-559-5800
Honolulu (Daniel K Inouye Intl), HI	310-725-3300	7:30 a.m.-4:00 p.m.	808-840-6100
Houston Hobby, TX	817-222-5006	8:00 a.m.-5:00 p.m.	713-847-1400
Indianapolis Intl, IN	817-222-5006	8:00 a.m.-4:00 p.m.	317-484-6600
Kahului/Maui, HI	310-725-3300	7:30 a.m.-4:00 p.m.	808-877-0725
Kansas City Intl, MO	817-222-5006	7:30 a.m.-4:00 p.m.	816-329-2700
Las Vegas McCarran, NV	310-725-3300	7:30 a.m.-4:00 p.m.	702-262-5978
Los Angeles Intl, CA	310-725-3300	7:00 a.m.-3:30 p.m.	310-342-4900
Louis Armstrong New Orleans Intl, LA	817-222-5006	7:00 a.m.-4:30 p.m.	504-471-4300
Memphis Intl, TN	404-305-5180	7:30 a.m.-4:00 p.m.	901-322-3350
Miami Intl, FL	404-305-5180	7:00 a.m.-4:00 p.m.	305-869-5400
Minneapolis/St. Paul, MN	817-222-5006	8:00 a.m.-4:00 p.m.	612-713-4000
Nashville Intl, TN	404-305-5180	7:00 a.m.-3:30 p.m.	615-781-5460
New York Kennedy Intl, NY	718-995-5426	8:00 a.m.-4:30 p.m.	718-656-0335
New York La Guardia, NY	718-995-5426	8:00 a.m.-4:30 p.m.	718-335-5461
Newark Liberty Intl, NJ	718-995-5426	7:30 a.m.-4:00 p.m.	973-565-5000
Norman Y. Mineta San Jose Intl, CA	310-725-3300	7:30 a.m.-4:00 p.m.	408-982-0750
Ontario Intl, CA	310-725-3300	7:30 a.m.-4:00 p.m.	909-983-7518
Orlando Intl, FL	404-305-5180	7:30 a.m.-5:00 p.m.	407-850-7000
Philadelphia Intl, PA	718-995-5426	8:00 a.m.-4:30 p.m.	215-492-4100
Phoenix Sky Harbor Intl, AZ	310-725-3300	7:30 a.m.-4:00 p.m.	602-379-4226
Pittsburgh Intl, PA	718-995-5426	8:00 a.m.-4:30 p.m.	412-269-9237
Portland Intl, OR	425-227-1389	7:30 a.m.-4:00 p.m.	503-493-7500
Raleigh-Durham, NC	404-305-5180	8:00 a.m.-4:30 p.m.	919-380-3125
Ronald Reagan Washington National, DC	718-995-5426	8:00 a.m.-4:30 p.m.	703-413-0330
Salt Lake City, UT	425-227-1389	7:30 a.m.-4:00 p.m.	801-325-9600
San Antonio Intl, TX	817-222-5006	8:00 a.m.-4:30 p.m.	210-805-5507
San Diego Lindbergh Intl, CA	310-725-3300	8:00 a.m.-4:30 p.m.	619-299-0677
San Francisco Intl, CA	310-725-3300	7:00 a.m.-3:30 p.m.	650-876-2883
San Juan Intl, PR	404-305-5180	7:30 a.m.-5:00 p.m.	787-253-8663
Seattle-Tacoma Intl, WA	425-227-1389	7:30 a.m.-4:00 p.m.	206-768-2900
St. Louis Lambert, MO	817-222-5006	7:30 a.m.-4:00 p.m.	314-890-1000
Tampa Intl, FL	404-305-5180	7:30 a.m.-4:00 p.m.	813-371-7700
Ted Stevens Anchorage Intl, AK	907-271-5936	7:30 a.m.-4:00 p.m.	907-271-2700
Teterboro, NJ	718-995-5426	8:00 a.m.-4:30 p.m.	201-288-1889
Washington Dulles Intl, DC	718-995-5426	8:00 a.m.-4:30 p.m.	571-323-6375
West Palm Beach, FL	404-305-5180	8:00 a.m.-4:30 p.m.	561-683-1867
Westchester Co, NY	718-995-5426	8:00 a.m.-4:30 p.m.	914-948-6520

\*Facilities can be contacted through the Rgnl Duty Officer during non-business hours.

NATIONAL WEATHER SERVICE (NWS)  
UPPER AIR OBSERVING STATIONS (UAOS)  
AND

WEATHER RADAR NETWORK



NOTE: FOR RELEASE LATER THAN 1130 UTC AND 2330 UTC, AND FOR SPECIAL RELEASES AT OTHER THAN THE SCHEDULED HOURS, AN AERONAUTICAL INFORMATION MESSAGE WILL BE FILED.



Air Route Traffic Control Center frequencies and their remoted transmitter sites are listed below for the coverage of this volume. Bold face type indicates high altitude frequencies, light face type indicates low altitude frequencies. To insure unrestricted IFR operations within the high altitude enroute sectors, the use of 720 channel communications equipment (25 kHz channel spacing) is required.

<b>® DENVER CENTER</b> – 121.5 <b>121.5</b> 125.9 243.0 <b>243.0</b> 284.7H-1-2-3-4-5-6, L-8-9-10-11-12-13-14-15, A-2	
Abajo Peak – <b>125.675</b> 125.35 354.05 <b>257.775</b>	(KZDV)
Abajo Peak/A/ – 127.55	
Ainsworth – 127.95 <b>127.95</b> 121.5 <b>121.5</b> 338.2 <b>338.2</b>	
Akron – 121.5 <b>121.5</b>	
Alamosa – <b>135.4</b> <b>132.225</b> 128.375 121.5 <b>121.5</b> 379.95 <b>377.05</b> <b>354.15</b>	
Aspen – <b>127.075</b> 125.35 119.85 363.15 354.05 <b>276.4</b>	
Ault – <b>120.575</b> <b>227.125</b>	
Brush/A/ – 133.95 <b>133.95</b> 317.55 <b>317.55</b>	
Brush/B/ – 118.475 <b>118.475</b> 225.4 <b>225.4</b>	
Casper – 135.6 <b>133.675</b> 121.5 <b>121.5</b> 363.025 <b>322.5</b> <b>296.7</b> 243.0 <b>243.0</b>	
Cherokee – 132.1 <b>132.1</b> 254.35 <b>254.35</b>	
Cheyenne – <b>134.575</b> <b>133.175</b> 125.9 <b>350.3</b> <b>307.1</b> 284.7	
Colby – <b>132.175</b> 127.65 <b>127.65</b> 360.65 <b>360.65</b> <b>254.325</b>	
Cortez – 118.575 348.7	
Crawford – <b>135.025</b> 127.95 338.2 <b>296.7</b> <b>239.05</b>	
Denver – 133.4 <b>132.85</b> 128.65 <b>126.875</b> 377.175 <b>353.65</b> <b>306.9</b> <b>296.7</b> 282.2	
Denver/A/ – 126.5 <b>126.5</b> 371.85 <b>371.85</b>	
Denver/B/ – 119.85 <b>119.85</b> 363.15 <b>363.15</b>	
Durango – 118.575 <b>118.575</b> 348.7 <b>348.7</b>	
Eastonville – 128.375 379.95	
Farmington – <b>133.425</b> <b>125.675</b> 121.5 <b>121.5</b> 118.575 <b>363.05</b> 348.7 <b>257.775</b> 243.0 <b>243.0</b>	
Goodland – 132.7 <b>132.7</b> 121.5 <b>121.5</b> 379.15 <b>379.15</b> 226.675 <b>226.675</b>	
Grand Island West – 132.7 <b>132.7</b> <b>296.7</b> 226.675	
Grand Junction – 121.5 <b>121.5</b>	
Grand Mesa – 135.125 <b>135.125</b> <b>126.725</b> <b>125.675</b> 323.25 <b>323.25</b> <b>316.125</b> <b>296.7</b> <b>257.775</b>	
Grand Mesa/A/ – 127.1	
Grand Mesa/B/ – 134.5 <b>134.5</b> 327.8 <b>327.8</b>	
Gunnison – <b>133.525</b> <b>127.075</b> 124.5 350.25 <b>319.0</b> <b>276.4</b>	
Hanksville – 127.55 <b>127.55</b> 256.875	
Haxton – <b>120.575</b> <b>227.125</b>	
Hayden – <b>128.325</b> 120.475 <b>377.075</b> 235.975	
Hayes Center – 127.025 <b>127.025</b> 288.35 <b>288.35</b>	
Hill City – 132.7 <b>132.7</b> 226.675 <b>226.675</b>	
Kremmling – 128.65 282.2	
La Junta – 133.4 <b>132.225</b> 379.95 377.175 <b>370.925</b> <b>354.15</b> <b>346.25</b> 243.0 <b>243.0</b>	
Lamar – 121.5 <b>121.5</b>	
Laramie – 125.9 <b>125.9</b> 284.7 <b>284.7</b>	
Loveland – 121.5 <b>121.5</b> 243.0 <b>243.0</b>	
Lusk – 135.6 <b>135.6</b> 363.025 <b>363.025</b>	
Medicine Bow – <b>133.175</b> 132.1 <b>350.3</b> 254.35	
Montrose – 127.1 343.65	
North Platte – 132.7 121.5 <b>121.5</b> 226.675	
O'Neill – <b>135.025</b> <b>239.05</b>	
Ogallala – 132.7 <b>126.325</b> 397.85 <b>257.75</b> 226.675	
Pueblo – 128.375 379.95 <b>377.05</b>	
Rapid City – 127.95 <b>127.95</b> 121.5 <b>121.5</b> 338.2 <b>338.2</b>	
Red Table Mtn – <b>132.85</b> <b>306.9</b>	
Rifle – 134.95 327.075	
Scottsbluff – 127.95 <b>127.95</b> 121.5 <b>121.5</b>	
Sundance – 135.6 <b>133.675</b> <b>127.95</b> 363.025 338.2 <b>322.5</b>	
Trinidad – 121.5 <b>121.5</b>	
Tuba City – <b>132.875</b> 127.55 <b>125.675</b> <b>118.225</b> <b>353.95</b> <b>335.65</b> <b>296.7</b> 256.875	
Walton Peak – 126.5 <b>126.5</b> 371.85 <b>371.85</b>	

## ® SALT LAKE CITY CENTER – 121.5 121.5

H-1-2-3, L-9-11-12-13-14

(KZLC)

Ashton – 132.4 128.35 **338.3** 239.25  
 Baker – 128.05 121.5 **121.5** 306.95  
 Battle Mountain – 132.25 **128.725** **352.0** 338.35 243.0 **243.0**  
 Big Piney – **133.25** 128.35 121.5 **121.5** 239.25  
 Billings – 127.75 **127.75** 351.9 **351.9**  
 Blackfoot – 128.35 **125.925** **379.25** **364.8** 239.25  
 Bliss – **121.15** 118.05 **379.1** 363.0  
 Boysen – 133.25 **133.25** **124.35** **364.8** 353.5 **353.5** 285.6 **285.6**  
 Bozeman – 132.4 **132.4** 121.5 **121.5** 338.3 **338.3**  
 Bozeman A – 118.975 226.675  
 Bryce Canyon – 133.6 121.5 **121.5** 269.25  
 Burley – 118.05 363.0  
 Burns – 121.5 **121.5**  
 Butte – 133.4 132.4 **132.4** **364.8** 338.3 **338.3** 285.4  
 Cedar City – 125.575 121.5 **121.5** 379.275 **364.8** 243.0 **243.0**  
 Conner – 121.5 **121.5** 118.05 363.0  
 Coppertown – 121.5 **121.5**  
 Cut Bank – 121.5 **121.5**  
 Delle – 243.0 **243.0**  
 Delta – 127.825 125.575 **120.275** 379.275 **269.275** 239.025  
 Elko – 132.25 **128.725** 121.5 **121.5** **364.8** **352.0** 338.35  
 Ely – 133.45 121.5 **121.5** 317.625  
 Fairfield – **135.775** 133.9 **127.825** 370.85 **257.7** 239.025  
 Fort Bridger – 121.5 **121.5**  
 Francis Peak – **135.775** 127.7 119.95 **119.95** 377.15 **364.8** 354.125 **257.7**  
 Glasgow – 126.85 121.5 **121.5** 305.2  
 Grassy Mountain – 128.55 **128.55** 269.175 **269.175**  
 Great Falls – 133.4 **119.75** 285.4 **251.15**  
 Green River – 124.35 **124.35** 353.5 **353.5**  
 Hanksville – 133.6 269.25  
 Idaho Falls – 121.5 **121.5**  
 Jackson – 133.25 **133.25** 285.6 **285.6**  
 Judith Mountain – 133.4 **132.425** **126.85** 121.5 **121.5** **317.45** **305.2** 285.4  
 Lakeside – 127.075 **119.75** **251.15** 244.875  
 Livingston A – 119.55 235.775  
 Lovell – 127.75 **127.75** 351.9 **351.9**  
 Malad City – 133.8 127.7 **125.925** **379.25** 354.125 350.35  
 Miles City – **132.425** 126.85 121.5 **121.5** **364.8** **317.45** 305.2  
 Miller Peak – 127.075 121.5 **121.5** 244.875  
 Miller Peak A – 119.75 **119.75**  
 Myton – **135.775** 119.95 **119.95** 377.15 **377.15** **257.7**  
 Rock Springs 2 – 121.5 **121.5**  
 Rome – 128.05 **121.15** **379.1** 306.95  
 Salmon – 132.4 **132.4** 121.5 **121.5** 338.3 **338.3**  
 Sheridan – 127.75 **127.75** 121.5 **121.5** 351.9 **351.9**  
 Squaw Butte – 128.05 **121.15** 118.05 **379.1** **364.8** 363.0 306.95 269.05 243.0 **243.0**  
 Sundance – 126.85 305.2  
 Sunnyside – 133.9 **127.925** 370.85 **348.725**  
 Tonopah – **134.525** 133.45 121.5 **121.5** **327.05** 317.625 243.0 **243.0**  
 Watford City – 126.85 305.2  
 Wilson Creek – **134.525** 133.45 **127.925** **348.725** **327.05** 317.625  
 Winnemucca – 132.25 121.5 **121.5** **364.8** 338.35  
 Worland – 121.5 **121.5**

® SEATTLE CENTER – 121.5 121.5 243.0 243.0	H-1-3, L-1-2-11-13
Antelope Mountain – 124.85 306.3	(KZSE)
Arcata – 124.85 121.5 121.5 306.3	
Badger Mountain – 134.95 134.95 127.05 127.05 121.5 121.5 353.9 353.9 270.3 270.3 243.0 243.0	
Beacon Hill – 127.05 127.05 120.3 120.3 353.9 273.6 273.6	
Bellingham – 121.5 121.5	
Cottonwood – 123.95 290.55	
Crescent City – 121.5 121.5	
Ellensburg – 121.5 121.5	
Ephrata – 121.5 121.5	
Ferndale – 360.7	
Hoquiam – 128.3 121.5 121.5 269.0	
Horton – 132.075 127.55 125.8 291.7 257.65 254.35 243.0 243.0 239.0	
Kimberly – 135.45 281.4	
King Mountain – 135.15 127.55 124.85 360.7 306.3 254.35	
Klamath Falls – 134.9 127.6 346.35 263.05	
Klickitat – 135.45 126.6 126.6 121.5 121.5 119.65 343.6 343.6 281.4 257.6	
Lakeside – 123.95 290.55	
Lakeview – 135.35 127.6 346.35 335.55 243.0 243.0	
Larch Mountain – 128.3 128.3 126.6 126.6 343.6 343.6 269.0 269.0	
Marlin – 126.1 291.6	
Medford – 121.5 121.5 243.0 243.0	
Mohler – 128.45 307.8	
Mt Brynon – 121.5 121.5	
Mullan Pass – 128.45 307.8	
Nassel – 124.2 317.6	
North Bend – 121.5 121.5	
Rainbow Ridge – 135.15 124.85 360.7 306.3	
Redmond – 135.35 134.9 128.15 126.15 121.5 121.5 121.35 335.55 279.6 269.475 263.05 257.75	
243.0 243.0	
Rex-Parrett – 121.35 279.6	
Scappoose – 128.15 124.2 317.6 257.75	
Spokane – 123.95 119.225 335.5 290.55 243.0 243.0	
Tatoosh – 125.1 125.1 319.2 319.2 243.0 243.0	
Walla Walla – 121.5 121.5	
Wallula – 132.6 121.5 121.5 321.3 269.35 243.0 243.0	
Wenatchee – 126.1	
Whidbey Island – 134.95 125.1 125.1 319.2 319.2 270.3	
Yakima – 132.6 120.3 120.3 273.6 273.6 269.35	

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VHF frequencies available at Flight Service Stations and at their remote communication outlets (RCO's) are listed below for the coverage of this volume. 'T' indicates transmit only and 'R' indicates receive only. RCO's available at NAVAID's are listed after the NAVAID name. RCO's not at NAVAID's are listed by name.

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**BOISE RADIO**

ASHTON RCO 122.2  
BLISS RCO 122.4  
BOISE RCO 122.6  
CASCADE RCO 122.5  
COEUR D'ALENE RCO 122.4  
CONNOR RCO 122.5  
COTTONWOOD RCO 122.2  
HAILEY RCO 122.4  
IDAHO FALLS RCO 122.55  
LEWISTON RCO 122.3  
MALAD CITY RCO 122.4  
MOUNTAIN HOME RCO 122.6  
MULLAN PASS VOR/DME 122.4  
POCATELLO RCO 122.3  
ROME RCO 122.2  
SALMON VOR/DME 122.6  
STANLEY RCO 122.6  
TWIN FALLS RCO 122.3

**CASPER RADIO**

BIG PINEY VOR/DME 122.3  
BOYSEN RESERVOIR VOR/DME 122.3  
CASPER RCO 122.6  
CHEROKEE RCO 122.4  
CHEYENNE RCO 122.3  
CODY RCO 122.3  
CRAZY WOMAN VOR/DME 122.2  
DOUGLAS RCO 122.4  
DUNOIR RCO 122.6  
FORT BRIDGER RCO 122.3  
GILLETTE RCO 122.3  
JACKSON RCO 122.2  
LARAMIE VOR/DME 122.6  
LUSK RCO 122.3  
MEDICINE BOW RCO 122.5  
NEWCASTLE RCO 122.5  
RAWLINS RCO 122.2  
RIVERTON RCO 122.2  
ROCK SPRINGS RCO 122.2  
ROCK SPRINGS VOR/DME 122.6  
SHERIDAN RCO 122.5  
SHERMAN HILL RCO 122.2  
WHEATLAND RCO 122.2  
WORLAND RCO 122.4

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**GREAT FALLS RADIO**

BILLINGS RCO 122.3  
BOZEMAN VOR/DME 122.5  
BUTTE RCO 122.2  
COPPERTOWN RCO 122.3  
CUT BANK VOR/DME 122.2  
DILLON RCO 122.2  
DRUMMOND RCO 122.6  
GLASGOW RCO 122.4  
GLENDALE DME 122.6  
GREAT FALLS RCO 122.3  
HARLOWTON RCO 122.4  
HAVRE RCO 122.5  
HELENA RCO 122.2  
JUDITH MOUNTAIN RCO 122.2  
LAKEVIEW RCO 122.5  
LEWISTOWN RCO 122.6  
LIVINGSTON RCO 122.2  
MILES CITY RCO 122.2  
MILLER PEAK RCO 122.2  
SIDNEY RCO 122.3  
TOWER HILL RCO 122.3  
WOLF POINT RCO 122.2

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**MC MINNVILLE RADIO**

ASTORIA RCO 122.3  
BAKER CITY RCO 122.4  
BURNS RCO 122.5  
CAPE BLANCO RCO 122.4  
DODSON BUTTE RCO 122.6  
ENTERPRISE RCO 122.5  
EUGENE RCO 122.3  
HOOD RIVER RCO 122.3  
KIMBERLY RCO 122.6  
KLAMATH FALLS RCO 122.6  
LA GRANDE NDB 122.5  
LAKEVIEW VORTAC 122.3  
MEDFORD RCO 122.2  
NEWBERG RCO 122.45  
NEWPORT RCO 122.5  
NORTH BEND RCO 122.4  
ONTARIO RCO 122.3  
PENDLETON RCO 122.2  
REDMOND RCO 122.5  
ROSEBURG VOR/DME 122.55  
SALEM RCO 122.6  
SEXTON SUMMIT RCO 122.5  
SUNRIVER RCO 122.3

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**SEATTLE RADIO**

BADGER MOUNTAIN RCO 122.3  
BELLINGHAM RCO 122.15  
BUCKHORN MTN RCO 122.2  
ELLENSBURG RCO 122.2  
EPHRATA RCO 122.2  
HOQUIAM RCO 122.2  
JUMP-OFF-JOE RCO 122.4  
KLICKITAT RCO 122.65  
LARCH MOUNTAIN RCO 122.3  
MICA PEAK RCO 122.5  
MOSES LAKE VOR/DME 122.4  
MOUNT CONSTITUTION RCO 122.3  
OAK HARBOR RCO 122.4  
OMAK RCO 122.2  
PAINE RCO 122.2  
PORT ANGELES RCO 122.6  
PULLMAN VOR/DME 122.6  
SEATTLE RCO 122.5  
SOUTHWEST WASHINGTON RCO 122.25  
SPOKANE RCO 122.2  
SPOKANE RCO 122.6  
STAMPEDE PASS RCO 122.4  
TATOOSH VORTAC 122.5  
VANCOUVER RCO 122.35  
WALLA WALLA RCO 122.3  
WENATCHEE RCO 122.6  
YAKIMA RCO 122.5

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The use of VOR airborne and ground checkpoints is explained in Aeronautical Information Manual, Basic Flight Information and ATC Procedures.

NOTE: Under columns headed "Type of Checkpoint" & "Type of VOT Facility" G stands for ground. A/ stands for airborne followed by figures (2300) or (1000-3000) indicating the altitudes above mean sea level at which the check should be conducted. Facilities are listed in alphabetical order, in the state where the checkpoints or VOTs are located.

IDAHO  
VOR RECEIVER CHECKPOINTS

Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag	Dist. from Fac. N.M.	Checkpoint Description
Idaho Falls (Idaho Falls Rgnl).....	113.85/IDA	G	208	0.8	At intersection of Twys A and A4.
Twin Falls (Joslin Fld/Magic Valley Rgnl) ...	113.1/TWF	G	065	0.8	On runup area at apch end Rwy 26.

VOR TEST FACILITIES (VOT)

Facility Name (Airport Name)	Freq.	Type VOT Facility	Remarks
Boise (Boise Air Terminal-Gowen Field) ....	116.7	G	

MONTANA  
VOR RECEIVER CHECKPOINTS

Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag	Dist. from Fac. N.M.	Checkpoint Description
Bozeman (Bozeman Yellowstone Intl).....	112.4/BZN	G	272	0.5	Twy at apch end Rwy 12.
	112.4/BZN	G	145	0.7	Twy H at Twy A.
Great Falls (Great Falls Intl) .....	115.1/GTF	G	030	2.3	On Twy A between A5 and A6.
	115.1/GTF	G	030	2.9	At intersection of Twy A and A3.
Helena (Helena Rgnl) .....	117.7/HLN	G	242	0.7	On Twy E on South side of Rwy 27.
Miles City (Frank Wiley Field).....	112.1/MLS	G	042	4.2	On twy leading to Rwy 31.
Missoula (Missoula Montana).....	112.8/MSO	G	348	0.6	Terminal ramp east of Twy D.

OREGON

VOR RECEIVER CHECKPOINTS

Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag	Dist. from Fac. N.M.	Checkpoint Description
<b>Astoria</b> (Astoria Regional).....	114.0/AST	G	156	0.5	East edge of ramp in front of large hangar.
<b>Corvallis</b> (Corvallis Muni) .....	115.4/CVO	G	049	0.5	On S edge of terminal ramp.
<b>Eugene</b> (Mahlon Sweet Field) .....	112.9/EUG	G	075		Ramp W of old tower near int of Twy D & Twy K.
<b>Klamath Falls</b> (Crater Lake/Klamath Rgnl)..	115.9/LMT	G	298	1.0	On ramp N of Twy E.
<b>Pendleton</b> (Eastern Oregon Rgnl At Pendleton).....	114.7/PDT	G	079	3.8	On W diagonal Twy B.

VOR TEST FACILITIES (VOT)

Facility Name (Airport Name)	Freq.	Type VOT Facility	Remarks
<b>Portland Intl</b> .....	111.0	G	Unusable on ANG ramp; Twy B east of Twy B6; Twy B west of Rwy 21; Twy C east of Twy C6; Twy C west of C3; Twy D; Twy H.
<b>Portland-Hillsboro</b> .....	115.2	G	
<b>Rogue Valley Intl-Medford</b> .....	117.2	G	Unusable on Twy A-6, hangar area W of Twy A-6 and Twy A NW of Twy C.

VOR RECEIVER CHECKPOINTS and VOR TEST FACILITIES

WASHINGTON  
VOR RECEIVER CHECKPOINTS

Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag	Dist. from Fac. N.M.	Checkpoint Description
<b>Moses Lake</b> (Grant County Intl) .....	115.0/MWH	G	167	1.2	South Twy A, east of compass rose.
	115.0/MWH	G	194	1.2	On runup area Rwy 04.
	115.0/MWH	G	313	1.0	On runup area Rwy 14L.
<b>Olympia</b> (Olympia Rgnl).....	113.4/OLM	G	350	0.3	On E runup area Rwy 17.
<b>Paine</b> (Seattle Paine Fld Intl).....	110.6/PAE	G	172	1.16	Intersection Twy A8.
<b>Pasco</b> (Tri-Cities).....	113.75/PSC	G	120	0.5	On the compass rose between Twy E2 and E3.
<b>Seattle</b> (Auburn Muni) .....	116.8/SEA	G	314	7.2	Taxiway A4 runup area.
<b>Walla Walla</b> (Walla Walla Rgnl) .....	116.4/ALW	G	035	0.5	On Twy A between A2 and A3.
<b>Wenatchee</b> (Pangborn Mem).....	114.35/EAT	G	102		On Twy A between Twy A2 and A3.

VOR TEST FACILITIES (VOT)

Facility Name (Airport Name)	Freq.	Type VOT Facility	Remarks
<b>Seattle</b> (Boeing Field/King County Intl) .....	108.6	G	
<b>Seattle</b> (Seattle-Tacoma Intl) .....	117.5	G	
<b>Spokane</b> (Felts Field).....	114.0	G	
<b>Spokane Intl</b> .....	109.6	G	

WYOMING  
VOR RECEIVER CHECKPOINTS

Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag	Dist. from Fac. N.M.	Checkpoint Description
<b>Jackson</b> (Jackson Hole) .....	115.4/JAC	G	174	0.5	On Twy A, approximately 1,000' S of AER 19.
<b>Rock Springs</b> (Southwest Wyoming Rgnl) ..	116.0/OCS	G	270	2.3	Intersection Twys B and E.

# PARACHUTE JUMPING AREAS

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The following tabulation lists all reported parachute jumping areas in the area of coverage of this directory. Unless otherwise indicated, all activities are conducted during daylight hours and under VFR conditions. NOTAM D's may be issued to advise users of specific dates and times if outside the times /altitudes that are published. The busiest periods of activity are normally on weekends and holidays, but jumps can be expected at anytime during the week at the locations listed. Parachute jumping areas within restricted airspace are not listed.

All times are local and altitudes MSL unless otherwise specified.

Contact facility and frequency is listed at the end of the remarks, when available, in bold face type.

Refer to Federal Aviation Regulations Part 105 for required procedures relating to parachute jumping.

Organizations desiring listing of their jumping activities in this publication should contact Flight Service, tower, or ARTCC.

Qualified parachute jumping areas will be depicted on the appropriate visual chart(s).

Note: (c) in this publication indicates that the parachute jumping area is charted.

To qualify for charting, a jump area must meet the following criteria:

- (1) Been in operation for at least 1 year.
- (2) Log 1,000 or more jumps each year.

In addition, parachute jumping areas can be nominated by FAA Regions if special circumstances require charting.

LOCATION	DISTANCE AND RADIAL FROM NEAREST VOR/VORTAC OR GEOGRAPHIC COORDINATES	MAXIMUM ALTITUDE	REMARKS
<b>IDAHO</b>			
Burley .....	13 NM; 035° Burley .....	15,000	Daily SR-SS.
Joslin Fld/Magic Valley Rgnl .....	0.1 NM; 359° Twin Falls .....	14,500	2 NM radius. May-Oct, weekends.
(c) McCall Muni Arpt, Smokejumper Base .....	8.55 NM; 012.41° Donnelly .....	9,500	8 NM radius. Apr-Oct, SR-SS daily.
(c) Star Skydiving Center .....	17 NM; 289° Boise .....	16,000	5NM radius. SR-2 hrs after SS daily.
(c) Caldwell Exec .....	20 NM; 269° Boise .....	17,500	5 NM radius. 1/2 hour before SR-1 hour after SS.

<b>MONTANA</b>			
(c) Butler Creek .....	19 NM; 300° Missoula .....	2,000 AGL	0.5 NM radius. Occasional use.
Dornblaser Fld .....	5.2 NM; 124° Missoula .....	12,500 AGL	0.5 NM radius. Occasional use.
(c) Grant Creek .....	1.5 NM; 057° Missoula .....	12,500 AGL	0.5 NM radius. Occasional use.
(c) Helena, Ft Harrison AAF .....	6 NM; 265° Helena .....	14,500	2 NM radius. Daily 24 hrs. <b>Helena Rgnl ATCT-A/C (HLN) 118.3.</b>
(c) Kalispell, Carson Fld Arpt .....	28 NM; 238° Kalispell .....	14,000 AGL	2 NM radius. 0800-SS daily.
Kalispell, City Arpt .....	6 NM; 230° Kalispell .....	14,000 AGL	2 NM radius. 0800-SS daily.
(c) Laurel Muni Arpt .....	9 NM; 208° Billings .....	14,500	2 NM radius. Daily SR-SS.
Livingston, Mission Fld .....	1 NM; 010° Livingston .....	14,500	2 NM radius. Daily SR-SS.
(c) Missoula Montana Arpt .....	1.4 NM; 319° Missoula .....	1,500 AGL	0.5 NM radius. May-Sep daily SR-SS, Oct-Apr occasional use.
Nine Mile R.S. ....	17 NM; 293° Missoula .....	2,000 AGL	0.5 NM radius. Occasional use.
(c) Raser Ranch .....	2 NM; 357° Missoula .....	3,000 AGL	0.5 NM radius Occasional use.
Roundup Arpt .....	40 NM; 351° Billings .....	14,500	Weekends SR-SS.
(c) Six Mile .....	15 NM; 304° Missoula .....	2,000 AGL	0.5 NM radius. Occasional use.
(c) Stevensville Arpt .....	25 NM; 166° Missoula .....	14,000	1 NM radius. Wed and weekends SR-SS.
(c) Stoney Creek .....	17 NM; 300° Missoula .....	2,000 AGL	0.5 NM radius. Occasional use.
Three Forks Arpt .....	18 NM; 275° Bozeman .....	14,500	2 NM radius. Daily SR-SS.
University Campus .....	5 NM; 112° Missoula .....	12,500 AGL	0.5 NM radius. Occasional use.
West Yellowstone, Yellowstone Arpt	60 NM; 034° DuBois .....	1,500 AGL	June-Sep.
(c) Whitefish Arpt, Skydive Whitefish .....	13 NM; 319° Kalispell .....	13,000	3 NM radius. June through September, Sunrise to Sunset. <b>Salt Lake City ARTCC 133.4.</b>

## PARACHUTE JUMPING AREAS

LOCATION	DISTANCE AND RADIAL FROM NEAREST VOR/VORTAC OR GEOGRAPHIC COORDINATES	MAXIMUM ALTITUDE	REMARKS
<b>OREGON</b>			
(c) Albany, Northwest Parachute Club.....	18 NM; 032° Corvallis.....	18,000	2 NM radius. SR-1 hr after SS Wed-Sun. Occasional hours Mon-Tue.
(c) Creswell, Hobby Fld.....	15 NM; 125° Eugene .....	15,000	5 NM radius. SR-SS Daily. <b>Mahlon Sweet Fld Twr-TRACON 119.6.</b>
(c) Estacada, Beaver Oaks Arpt.....	25 NM; 076° Newberg .....	13,000 AGL	1.5 NM radius. 0800-2300 Daily.
(c) Harrisburg, Daniels Fld Arpt. ....	11 NM; 025° Eugene .....	13,000 AGL	5 NM radius. 1200-SS Daily, 0800-SS Weekends and Holidays.
(c) Hermiston Muni Arpt.....	16 NM; 286° Pendleton .....	15,000	2 NM radius. SR-SS weekends. Occasional hours weekdays.
(c) Madras, Madras Muni Arpt	44-40-16 N 121-11-05 W	13,000	3 NM radius. Continuous SR-SS. Seattle Center 126.15.
(c) Medford, Beagle Sky Ranch Arpt	5 NM; 350° Rogue Valley .....	14,000	Daily SR-2200.
(c) Mollala, Skydive Oregon Arpt....	19 NM; 110° Newberg .....	14,500	5 NM radius. 0800-2200, Daily. Portland Intl Twr 118.1
(c) Portland, Mulino State Arpt	18 NM; 095° Newberg	12,500	2 NM radius. 1000-SS, Daily. <b>Portland Intl Twr 118.1.</b>
<b>WASHINGTON</b>			
(c) Coupeville NOLF	5 NM; 110° Penn Cove.....	12,500	2 NM radius. Occasional use.
Fort Lewis, Abrams Drop Zone.....	7.5 NM; 207° McChord.....	1,000	1 NM radius. Occasional use.
Fort Lewis, Anzio Drop Zone.....	9 NM; 167° McChord.....	10,000	0.3 NM radius. Occasional use.
Fort Lewis, Dakto Drop Zone .....	7.5 NM; 182° McChord.....	1,000	0.3 NM radius. Occasional use.
Fort Lewis, Darby Drop Zone .....	8.5 NM; 097° Olympia .....	10,000	0.5 NM radius. Occasional use.
Fort Lewis, El Guettar Drop Zone ...	7.5 NM; 092° Olympia.....	10,000	0.3 NM radius. Occasional use.
Fort Lewis, Gray AAF (Joint Base Lewis-McChord) Drop Zone.....	6 NM; 217° McChord.....	10,000	1 NM radius. Occasional use.
Fort Lewis, Marion Drop Zone.....	11 NM; 197° McChord .....	10,000	1 NM radius. Occasional use.
(c) Fort Lewis, Merrill Drop Zone....	9 NM; 092° Olympia .....	10,000	0.5 NM radius. Occasional use.
Fort Lewis, Mytkina Drop Zone .....	10 NM; 065° Olympia.....	1,000	1 NM radius. Occasional use.
Fort Lewis, Point Salinas Drop Zone	7.5 NM; 208° McChord.....	10,000	1 NM radius. Occasional use.
Fort Lewis, Pointe De Hoc Drop Zone .....	11.5 NM; 199° McChord.....	10,000	0.25 NM radius. Occasional use.
(c) Fort Lewis, Rogers Drop Zone ...	7 NM; 162° McChord.....	10,000	0.5 NM radius. Occasional use.
Fort Lewis, Solo Drop Zone.....	6.5 NM; 252° McChord.....	10,000	1 NM radius. Occasional use.
(c) Lake Chelan Airport.....	At field.....	10,000	5 NM radius. 0700-2100.
(c) Larson/Rainer Drop Zone .....	17 NM; 217° Moses Lake.....	3,000	Continuous. Personnel and hvy equip. <b>Grant Co Intl Twr 126.4.</b>
Monroe, First Air Fld.....	14 NM; 091° Paine.....	12,500	0.5 NM radius. Daily SR-SS.
(c) Pullman/Moscow Rgnl Arpt.....	8 NM; 025° Pullman .....	13,000	Daily, SR-SS.
(c) Ritzville, West Plains Skydiving Drop Zone.....	36 NM; 207° Spokane .....	15,000	2 NM radius. SR-SS weekends, 1700-SS weekdays. Heavy use Apr-Nov. <b>Grant Co Intl Twr 126.4. Seattle ARTCC 126.1.</b>
(c) Shelton, Sanderson Fld Arpt ....	19 NM; 309° Olympia.....	14,000	2 NM radius. Daily 0800-2300.
(c) Snohomish, Harvey Fld .....	7 NM; 078° Paine.....	15,000	2 NM radius. Continuous.
(c) Snohomish, Harvey Fld .....	8 NM; 075° Paine.....	15,000	1 NM radius. Continuous.
(c) Spokane, Hayford Drop Zone ....	12 NM; 340° Spokane .....	10,000	0.5 NM radius. Occasional use.
(c) Tacoma, McChord Field (Joint Base Lewis-McChord).....	28 NM, 181° Seattle.....	1,500 AGL	Weekends and occasional nights.
(c) Tekoa, Willard Fld .....	31 NM; 110° Spokane .....	12,500	1 NM radius. Daily.
(c) Toledo, Ed Carlson Meml Fld/South Lewis Co.....	30 NM; 150° Olympia.....	12,500	5 NM radius. Continuous.



Contained within this tabulation, and listed alphabetically by airport name, are all private-use airports charted on the U.S. IFR Enroute Low and High Altitude charts in the United States, having terminal approach and departure control facilities. Additionally, listed by country, are all Canadian and Mexican airports that appear on the U.S. IFR Enroute charts with approach and departure control services. All frequencies transmit and receive unless otherwise noted. Radials defining sectors are outbound from the facility.

## UNITED STATES

FACILITY NAME	CHART & PANEL
Cabaniss Fld NOLF, TX (NGW) Corpus App/Dep Con 125.4 307.9 Navy Cabaniss Tower 119.65 299.6 (Mon–Thu 1400–0500Z†, Fri 1400–0100Z‡)	L–20H, 21A
Fentress NALF, VA (NFE) Oceana App/Dep Con 123.9 266.8	H–10I, 12I, L–35D
Fry, OH (ØOH8) Columbus App/Dep Con 118.425	L–27E
Gila Bend AF AUX, AZ (GXF) Luke App/Dep Con 125.45 263.125 (South) (Mon–Thu 1300–0530Z, Fri 1300–0130Z, clsd weekends and hol)	H–4J, L–5B
Glasgow Industrial, MT (Ø7MT) Salt Lake Center App/Dep Con 126.85 305.2	H–1E, 2G, L–13D
Joe Williams NOLF, MS (NJW) Meridian App/Dep Con 276.4 Bravo Tower 118.475 279.2 355.8 (Mon–Fri 1400–2330Z‡)	H–6J, L–18G
Oak Grove MCOLF, NC (13NC) Cherry Point App/Dep Con 119.35 377.175	L–35B
Shell AHP, AL (SXS) Cairns App/Dep Con 133.45 239.275 (24 hrs Tue–Sat, 1200–0500Z‡ Sun–Mon) other times ctc Jax Center App/Dep Con 134.3 322.55 Shell Tower 139.125 244.5 (1230–0600Z‡ Mon–Fri, exc hol)	L–22I
USAF Academy Bullseye Aux Airfield, CO (CO9Ø) ASOS 125.0	L–10F
Webster NOLF, MD (NUI) Patuxent App/Dep Con 121.0 250.3 Navy Webster Tower 127.0 358.0 (Mon–Fri, exc hol, other times on request, 1400–2200Z‡ or SS, whichever occurs first) For Cinc Del when NHK Apch is clsd ctc Potomac Apch at 866–640–4124	H–10I, 12I, L–34E, 36I
Whitehouse NOLF, FL (NEN) Jax Center App Con 127.775 377.075 Jax Center Dep Con 127.775 379.9 Whitehouse Tower 125.15 307.325 340.2 (Manned during scheduled operations only)	H–8H, L–21D, 24G
William P Gwinn, FL (Ø6FA) Palm Beach App/Dep Con 317.4 Gwinn Tower 120.4 279.25 (Mon–Fri 1300–2100Z‡) Gnd Con 121.65 279.25	H–8I, L–23C

## CANADA

FACILITY NAME	CHART & PANEL
Abbotsford, BC (CYXX) ATIS 119.8 (1500–0700Z‡) Victoria Trml App/Dep Con 132.7 (Avbl on ground) Tower 119.4 (Inner) 121.0 (Outer) 295.0 (1500–0700Z‡) Gnd Con 121.8 MF 119.4 295.0 (0700–1500Z‡) (Shape irregular to 4500')	H–1B, L–12F
Amos/Magny, QC (CYEY) Montreal Center App/Dep Con 125.9	H–11B
Atikokan Muni, ON (CYIB) MF 122.3 (5 NM to 4500' No ground station)	L–14I
Barrie–Orillia (Lake Simcoe Rgnl), ON (CYLS) Toronto Center App/Dep Con 124.025	H–11B, L–31D
Bar River, ON (CPF2) Toronto Center App/Dep Con 132.65	L–31C
Bathurst, NB (CZBF) Moncton Center App/Dep Con 134.25 AWOS 127.925	L–32J
Boundary Bay, BC (CZBB) ATIS 125.5 (1500–0700Z‡) Vancouver App/Dep Con 132.3 363.8 Tower 118.1 (Inner) 127.6 (Outer) (1500–0700Z‡) Gnd Con 124.3 MF 118.1 (0700–1500Z‡ to 2000' . Vancouver Trml 125.2 above 2000' . Shape irregular to 2500' .)	H–1B, L–1E
Brampton, ON (CNC3) Toronto Trml App/Dep Con 119.3	L–31D
Brandon Muni, MB (CYBR) Winnipeg Center App/Dep Con 132.25 MF 122.1 (5 NM to 4000')	H–2H

CANADA	
FACILITY NAME	CHART & PANEL
Brantford, ON (CYFD) Toronto Trml App/Dep Con 128.27	L-31D
Brockville Rgnl Tackaberry ON (CNL3) Montreal Center App/Dep Con 134.675	L-32G
Bromont, QC (CZBM) Montreal Center App/Dep Con 132.35 MF 122.15 (5 NM to 3400') AUTO 122.975	L-32G
Burlington Executive, ON (CZBA) Toronto Center App/Dep Con 119.3 AUTO 122.55	L-31D
Castlegar/West Kootenay Rgnl, BC (CYCG) Vancouver Center App/Dep Con 134.2 227.3 MF 122.1 (5 NM to 6500')	H-1C
Centralia/James T. Fld Muni, ON (CYCE) Toronto Center App/Dep Con 135.30	H-10G, 11B, L-31D
Charlottetown, PE (CYYG) Moncton Center App/Dep Con 135.65 384.8 MF 118.0 (5 NM to 3200')	H-11E, L-32J
Chatham-Kent, ON (CYCK) Cleveland Center App/Dep Con 132.25	H-10G, L-30G
Collingwood, ON (CNY3) Toronto Center App/Dep Con 124.02	H-11B, L-31D
Cornwall Rgnl, ON (CYCC) Boston Center App/Dep Con 135.25 377.1	L-32G
Cranbrook/Canadian Rockies Intl, BC (CYXC) Vancouver Center App/Dep Con 133.6 MF 122.3 (5 NM to 6100')	H-1C
Debert, NS (CCQ3) Halifax Trml App/Dep Con 119.2 AUTO 122.275	H-11E, L-32J
Digby, NS (CYID) Moncton Center App/Dep Con 123.9	L-32J
Downsview, ON (CZVD) Toronto Center App/Dep Con 133.4 MF 126.2 (1300-2300Z±, 3 NM to 1700')	H-11B, L-31E
Drummondville, QC (CSC3) Montreal Center App/Dep Con 132.35	L-32H
Earlton (Timiskaming Rgnl), ON (CYXR) MF 122.0 (5 NM to 3800')	H-11B
Elliot Lake Muni, ON (CYEL) Toronto Center App/Dep Con 135.4	L-31C
Fort Frances Muni, ON (CYAG) Minneapolis Center App/Dep Con 120.9	L-14H
Fredericton Intl, NB (CYFC) ATIS 127.55 (1045-0345Z±, OT AWOS) Moncton Center App/Dep Con 124.3 135.5 270.8 Tower 119.0 (1045-0345Z±) Gnd Con 121.7 (1045-0345Z±) MF 119.0 (0345-1045Z±, 5 NM to 3500')	H-11E, L-32I
Goderich, ON (CYGD) Toronto Center App/Dep 135.3 266.3	H-11B, L-31D
Greenwood, NS (CYZX) ATIS 128.85 244.3 (1100-0000Z±) App/Dep Con 120.6 335.9 Tower 119.5 236.6 324.3 Gnd Con 133.75 289.4 Clnc Del 128.025 283.9	H-11E, L-32J
Grimsby Air Park, ON (CNZ8) Toronto Trml App/Dep Con 128.27 268.75 Tower 125.0 308.475	L-31E
Halifax/Shearwater, NS (CYAW) ATIS 129.175 308.8 (Ltd hrs) App/Dep Con 119.2 MF Shearwater Advisory 119.0 126.2 340.2 360.2 (Ltd hrs) Gnd Con 121.7 250.1	H-11E, L-32J
Halifax/Stanfield Intl, NS (CYHZ) ATIS 121.0 Moncton Center App/Dep Con 135.3 Tower 118.4 236.6 Gnd Con 121.9 275.8 Clnc Del 123.95	H-11E, L-32J
Hamilton, ON (CYHM) ATIS 128.1 Toronto Trml App/Dep Con 119.7 Tower 125.0 Gnd Con 121.6	H-10H, 11B, L-11B
Kingston, ON (CYGK) ATIS 135.55 (1115-0400Z±) Montreal Center App/Dep Con 135.05 (0400-1115Z±) MF 122.5 (1115-0400Z± 5 NM to 3300')	H-11C, L-31E, 32F

## CANADA

FACILITY NAME	CHART & PANEL
Kitchener/Waterloo, ON (CYKF) ATIS 125.1 (1200-0400Z‡) Toronto Trml App/Dep Con 128.275 Waterloo Tower 126.0 118.55 (1200-0400Z‡) Gnd Con 121.8 MF 126.0 (0400-1200Z‡ 5 NM to 4000') AWOS 125.1 (0400-1200Z‡)	H-11B, L-31D
Lachute, QC (CSE4) Montreal Center App Con 124.65 268.3 Montreal Center Dep Con 132.85 268.3	L-32G
La Tuque, QC (CYLQ) Montreal Center App/Dep Con 134.5 AUTO 122.975	H-11C
Langley, BC (CYNJ) ATIS 124.5 (1630-0230Z, DT 1530-0330Z) Victoria Trml App/Dep Con 132.7 290.8 Tower 119.0 (1630-0230Z, DT 1530-0330Z) Gnd Con 121.9 MF 119.0 (0230-1630Z, DT 0330-1530Z 3 NM to 1900')	L-1E
Leamington, ON (CLM2) Detroit Approach App/Dep Con 134.3	L-30F
Lethbridge, AB (CYQL) ATIS 124.4 (1245-0545Z‡) Edmonton Center App/Dep Con 132.75 265.2 MF 121.0 (5 NM to 6000')	H-1D
Lindsay, ON (CNF4) Toronto Center App/Dep 134.25	L-31E, L-32F
Liverpool/South Shore Rgnl, NS (CYAU) Moncton Center App/Dep Con 123.9	L-32J
London, ON (CYXU) ATIS 127.8 (1120-0345Z‡) Toronto Center App/Dep 135.3 135.625 Tower 119.4 125.65 (1120-0345Z‡) Gnd Con 121.9 MF 119.4 (0345-1120Z‡ 5 NM to 3000')	H-10G, 11B, L-30G, 31D
Manitowaning/Manitoulin East Muni, ON (CYEM) Toronto Center App/Dep 135.4 260.9	L-31C
Maniwaki, QC (CYMW) Montreal Center App/Dep Con 126.57	L-32G
Mascouche, QC (CSK3) MF 122.35 (5 NM to 2500'. No gnd station. Excluding the portion S of the N shore of Riviere des Milles-Iles and 1 NM around Lac Agile Mascouche arpt.)	L-32G
Medicine Hat, AB (CYXH) ATIS 124.875 (1245-0345Z) MF 122.2 (1245-0345Z 5 NM to 5400')	H-1D
Midland/Huron, ON (CYEE) Toronto Center App/Dep 124.025	L-31D
Miramichi, NB (CYCH) Moncton Center App/Dep Con 123.7	H-11E, L-32J
Moncton/Greater Moncton Intl, NB (CYQM) ATIS 128.65 App/Dep 124.4 Tower 120.8 236.6 Gnd Con 121.8 275.8 Apron Advisory 122.075	H-11E, L-32J
Mont-Laurier, QC (CSD4) Montreal Center App/Dep Con 126.57	L-32G
Montreal Intl (Mirabel), QC (CYMX) ATIS 125.7 Montreal Center App/ Dep Con 124.65 268.3 MF 119.1 (7 NM shape irregular to 2000') (03-11Z (DT 02-10Z)) (emerg only 450-476-3141) VFR Advisory 134.15 GND 121.8 (11-03Z (DT 10-02Z)) TWR 119.1 (11-03Z (DT 10-02Z)) (emerg only 450-476-3141) GND Advisory 121.8 (03-11Z (DT 02-10Z)) (emerg only 450-476-3141) (PTC avbl)	H-11C, 12K, L-32G
Montreal/Pierre Elliott Trudeau Intl, QC (CYUL) ATIS 133.7 Montreal Trml App Con 118.9 126.9 132.85 268.3 Tower 119.3 119.9 124.3 (old port) 267.1 Gnd Con 121.0 (West) 121.9 (East) 275.8 Cinc Del 125.6 Apron 122.275 (West) 122.075 (East) Montreal Trml Dep Con 120.42 (SE-S-SW) 124.65 (W-NW-NE) 268.3 VFR Advisory 134.15	H-11C, 12K, L-32G

## CANADA

FACILITY NAME	CHART & PANEL
Montreal/St-Hubert, QC (CYHU) ATIS 124.9 (Apr-Oct Mon-Fri 1045-0500Z†, Apr-Oct Sat-Sun 1045-0300Z†, Nov-Mar Mon-Fri 1045-0400Z†, Nov-Mar Sat-Sun 1045-0100Z†) Montreal Center App/Dep Con 125.15 268.3 St. Hubert Tower 118.4 (VFR Arr North) 121.3 (VFR Arr South and East) (Apr-Oct Mon-Fri 1045-0500Z†, Apr-Oct Sat-Sun 1045-0300Z†, Nov-Mar Mon-Fri 1045-0400Z†, Nov-Mar Sat-Sun 1045-0100Z†) Gnd Con 126.4 (Apr-Oct Mon-Fri 1045-0500Z†, Apr-Oct Sat-Sun 1045-0300Z†, Nov-Mar Mon-Fri 1045-0400Z†, Nov-Mar Sat-Sun 1045-0100Z†) MF 118.4 (Apr-Oct Tues-Sat 0500-1045Z†, Apr-Oct Sun-Mon 0300-1045Z†, Nov-Mar Tues-Sat 0400-1045Z†, Nov-Mar Sun-Mon 0100-1045Z†) 5 NM shape irregular to 2000' VFR Advisory 134.15 MIL 135.9 322.1 (438 Sqn Ops)	H-11C, L-32G
Muskoka, ON (CYQA) Timmins Radio App/Dep Con 122.3 MF 122.3 (5 NM to 3900')	H-11B, L-31D
Nanaimo, BC (CYCD) ATIS 128.425 (1-877-517-2847)(1400-0500Z) Victoria Trml App/Dep 120.8 121.075 252.3 MF 122.1 291.8 1330-0530Z† (5 NM to 2500') GND ADV 122.6 (1330-0530Z (DT 1230-0430Z)) (emerg only 250-245-4032) (PTC avbl)	H-1B, L-1E
North Bay, ON (CYYB) ATIS 124.9 (1130-0330Z†) Toronto Center App/Dep 127.25 MF 118.3 (1130-0330Z† 7 NM to 5000')	L-31E
Oshawa, ON (CYOO) ATIS 125.675 (1130-0330Z†) Toronto Trml App/Dep Con 133.4 Tower 120.1 (1130-0330Z†) Gnd Con 118.4 MF 120.1 (0330-1130Z† 5 NM to 3000')	L-31E
Ottawa/Carp, ON (CYRP) ATIS 121.15 Ottawa Trml App/Dep Con 127.7	L-31E, 32F
Ottawa/Gatineau, QC (CYND) Ottawa Trml App/Dep Con 127.7 128.175 MF 122.3 (5 NM shape irregular to 2500) VFR Advisory Ottawa Trml 127.7 GND ADV 122.6 1130-0215Z (DT 1030-0115Z) (emerg only 819-643-2961)	H-11C, L-32G
Ottawa/MacDonald-Cartier Intl, ON (CYYW) ATIS 121.15 Ottawa App Con 135.15 Tower 118.8 (VFR South) 120.1 (VFR North) 118.8 341.3 Gnd Con 121.9 ClnC Del 119.4 Ottawa Dep Con 128.175	L-11C
Owen Sound/Billy Bishop Rgnl, ON (CYOS) Toronto Center App/Dep 132.575 290.6	L-31D
Pelee Island, ON (CYPT) Cleveland Center App/Dep Con 126.35 360.0	L-30F
Pembroke, ON (CYTA) Montreal Center App/Dep Con 135.2 Petawawa Advisory 126.4 250.1 (Mon-Fri 1300-2130Z†, OT PPR)	H-11C, L-31E, 32F
Penticton, BC (CYYF) Vancouver Center App/Dep Con 133.5 351.3 MF 118.5 (5 NM to 4100) GND ADV 121.9 (emerg only 250-492-3001)	H-1B
Peterborough, ON (CYPQ) Toronto Center App/Dep 134.25 MF 123.0 (5 NM to 3600')	H-11B, L-31E, 32F
Pincher Creek, AB (CZPC) Edmonton Center App/Dep Con 132.75 265.2	H-1D
Pitt Meadows, BC (CYPK) ATIS 125.0 (1500-0700Z†) Vancouver Center App Con 128.6 (Outer) 352.7 Pitt Tower 126.3 (1500-0700Z†) Gnd Con 123.8 Vancouver Center Dep Con 132.3 (South) 363.8 MF 126.3 (0700-1500Z†) (3NM to 2500)	L-1E
Quebec/Jean Lesage Intl, QC (CYQB) ATIS 134.6 Montreal Center App/Dep Con 124.0 127.85 135.025 270.9 322.8 Tower 118.65 236.6 Gnd Con 121.9 250.0	H-11D, L-32H
Riviere Du Loup, QC (CYRI) Montreal Center App/Dep Con 125.1 299.6	H-11D
Rouyn Noranda, QC (CYUY) Montreal Center App/Dep Con 125.9 MF 122.2 (5 NM to 4000')	H-11B

## CANADA

FACILITY NAME	CHART & PANEL
Saint John, NB (CYSJ) Moncton Center App/Dep Con 124.3 135.5 270.8 MF 118.5 (5 NM to 3400')	H-11E, L-32J
Sarnia (Chris Hadfield), ON (CYZR) Toronto Center App/Dep Con 134.375	H-10G, 11B, L-30F
Sault Ste Marie, ON (CYAM) ATIS 133.05 (1130-0330Z†) Toronto Center App/Dep Con 132.65 344.5 Tower 118.8 (1130-0330Z†) Gnd Con 121.7 (1130-0330Z†) MF 118.8 (0330-1130Z† 5 NM irregular shape to 3000')	H-2K, L-31B
Sherbrooke, QC (CYSC) Montreal Center App/Dep Con 132.55 MF 123.5 (Ltd hrs 5 NM to 3800')	H-11D, L-32H
South Renfrew Muni, ON (CNP3) Montreal Center App/Dep 124.275	L-31E, 32F
Southport, MB (CYPG) ATIS 120.85 (Mon-Fri 1400-2300Z† except holidays) Tower 126.2 384.2 (Mon-Fri 1400-2300Z† except holidays) Gnd Con 121.7 275.8	H-2H
Springwater Barrie Airpark, ON (CNA3) Toronto Center App/Dep Con 124.025	L-31D
St. Catharines/Niagara District, ON (CYSN) ATIS 128.525 (1215-0200Z†) Toronto Trml App/Dep Con 133.4 MF 123.25 (1215-0200Z† 5 NM to 3300')	H-10H, 11B, L-31E
St. Frederic, QC (CSZ4) Montreal Center App/Dep Con 135.025 270.9	L-32H
St. Georges, QC (CYSG) Montreal Center App/Dep Con 132.35 MF 122.15 (5 NM 3900' ASL)	H-32H, L-11D
St. Jean, QC (CYJN) Montreal Center App/Dep Con 125.15 268.3 Tower 118.2 (Apr-Oct 1230-0230Z† Nov-Mar 1300-0200Z†) Gnd Con 121.7	L-32G
Sudbury, ON (CYSB) ATIS 127.4 Toronto Center App/Dep Con 135.5 MF 125.5 (7 NM to 4000') Cinc Del 121.8 (PTC avbl)	H-31B, 10G, L-31D
Summerside, PE (CYSU) Moncton Center App/Dep Con 124.4 384.8	H-11E, L-32J
Thunder Bay, ON (CYQT) ATIS 128.8 Winnipeg Center App/Dep Con 132.125 Tower 118.1 (1100-0400Z†) Gnd Con 121.9 (1100-0400Z†) App/Dep 119.2 MF 118.1 (0400-1100Z† 5 NM to 4000')	H-2J, L-14J
Timmins/Victor M. Power, ON (CYTS) ATIS 124.95 Toronto Center App/Dep Con 128.3 MF 122.3 (5 NM to 4000')	H-11B
Toronto/Buttonville Muni, ON (CYKZ) Toronto Trml App/Dep Con 133.4 MF 124.8 (No gnd station. 5 NM shape irregular 2000 ASL)	L-31E
Toronto/Billy Bishop Toronto City Airport, ON (CYTZ) ATIS 133.6 (1130-0400Z†) App/Dep Con 133.4 Tower 118.2 119.2 (1130-0400Z†) Gnd Con 121.7 (1130-0400Z†)	L-31E
Toronto/Lester B Pearson Intl, ON (CYYZ) ATIS 120.825 133.1 App Con 132.8 124.475 125.4 Dep Con 127.575 128.8 Tower 118.35 118.7 Gnd Con 121.9 121.65 119.1 Cinc Del 121.3 (1200-0400Z†) A-CDM Coordinator 122.875 (122.825) Apron Tow Coordinator 136.525	H-11B, L-31D
Trenton, ON (CYTR) ATIS 135.45 257.7 App/Dep Con 128.4 324.3 Tower 128.7 236.6 Gnd Con 121.9 275.8 Cinc Del 124.35 286.4	H-11C, L-31E, 32F
Trenton/Mountain View, ON (CPZ3) Trenton Mil Advisory 268.0 or 122.35	H-11C, L-31E, 32F
Trois-Rivieres, QC (CYRQ) Montreal Center App/Dep Con 128.225 MF 122.35 (5 NM to 3200')	H-11C, L-32H
Val-D'or, QC (CYVO) Montreal Center App/Dep Con 125.9 308.3 MF 118.5 (1030-0325Z† 5 NM to 4000')	H-11B

## CANADA

FACILITY NAME	CHART & PANEL
Vancouver Intl, BC (CYVR) ATIS 124.6 App Con 128.6 128.17 (Outer) 133.1 134.225 (Inner) 352.7 Dep Con 126.125 (north) 132.3 (south) 363.8 Tower 118.7 (south) 119.55 (north) VFR 124.0 125.65 226.5 236.6 Gnd Con 121.7 (south) 127.15 (north) 275.8 Clnc Del 121.4	H-1B, L-1E
Victoria Intl, BC (CYYJ) ATIS 118.8 (0800-1400Z) App Con 125.45 Dep Con 125.95 Tower 119.1 (Outer) 119.7 (Inner) 239.6 Gnd Con 121.9 361.4 (1400-0800Z $\pm$ OT etc Kamloops 119.7) Clnc Del 126.4 (1400-0800Z $\pm$ )	H-1B, L-1E
Victoriaville, QC (CSR3) Montreal Center App Con 132.35 AUTO 122.17 (bil)	L-32H
Waterville/Kings Co Muni, NS (CCW3) Greenwood Trml App/Dep Con 120.6 335.9 Greenwood Tower 119.5 324.3	L-32J
Warton, ON (CYVW) Toronto Center App/Dep Con 132.575 MF 122.2 (5 NM to 3700')	H-11B, L-31D
Windsor, ON (CYQG) ATIS 134.5 (1200-0300Z $\pm$ ) Detroit App/Dep Con 118.95 132.35 134.3 284.0 Tower 124.7 (1200-0300Z $\pm$ ) Gnd Con 121.7 (1200-0300Z $\pm$ ) MF 124.7 (0300-1200Z $\pm$ 6 NM irregular shape to below 3000') VFR Advisory Detroit App Con 134.3 AWOS 134.5 (0300-1200Z $\pm$ )	H-10G, L-8J
Yarmouth, NS (CYQI) Moncton Center App/Dep Con 123.9 368.5 MF 123.0 (5 NM to 3100')	H-11E, L-32I

## MEXICO

FACILITY NAME	CHART & PANEL
Chihuahua Intl/General R Fierro Villalobos Intl (MMCU) ATIS 127.9 Chihuahua App Con 121.0 Chihuahua Tower 118.4	L-6I
Ciudad Juarez Intl/Abraham Gonzalez Intl (MMCS/CJS) Juarez App Con 119.9 Juarez Tower 118.9	H-4L, L-6F
Del Norte Intl (MMAN) ATIS 127.55 (1300-0300Z $\pm$ ) Monterrey App 119.75 120.4 Tower 118.6 Gnd 122.0	H-7B, L-20G
Durango Intl (MMDO/DGO) ATIS 132.1 Tower 118.1 Durango Info 122.3	H-7A
Matamoros Intl/General Servando Canales Intl (MMA) Matamoros App Con 118.0 Matamoros Tower 118.0	H-7C, L-21A
Mexicali Intl/General Rodolfo Sanchez Taboada Intl (MMML) ATIS 127.6 (1400-0200Z $\pm$ ) Mexicali App Con 118.2 Mexicali Tower 118.2 Mexicali Info 123.9 122.3	H-4I, L-4J, 5A
Monterrey Intl/General Mariano Escobedo Intl (MMMY) Monterrey ATIS 127.7 Monterrey App Con 119.75 120.4 Monterrey Dep Con 119.75 Monterrey Tower 118.1 Monterrey Gnd 121.9 Monterrey Clnc Del 123.75 (1200-0400Z $\pm$ ) Monterrey Info 122.45	H-7B, L-20G
Nuevo Laredo/Quetzalcoatl (MMNL/NLD) Nuevo Laredo App Con 118.3 Nuevo Laredo Tower 118.3	H-7B, L-20G
Reynosa Intl/General Lucio Blanco Intl (MMRX) Reynosa App Con 127.2 Reynosa Tower 118.8	H-7B, L-20H
Saltillo Intl/Plan De Guadalupe Intl (MMIO/SLW) Saltillo App Con 127.4 Saltillo Tower 118.4	H-7B
Tijuana Intl/General Abelardo L Rodriguez Intl (MMTJ) ATIS 127.9 Tijuana App Con 119.5 120.3 Tijuana Tower 118.1 Tijuana Clnc Del 122.35 Tijuana Info 132.1	H-4I, L-4H
Torreon Intl (MMTC) App Con 119.6 Tower 118.5 Info 122.3	H-7A



## PREFERRED IFR ROUTES

A system of preferred routes has been established to guide pilots in planning their route of flight, to minimize route changes during the operational phase of flight, and to aid in the efficient orderly management of the air traffic using federal airways. The preferred IFR routes which follow are designed to serve the needs of airspace users and to provide for a systematic flow of air traffic in the major terminal and en route flight environments. Cooperation by all pilots in filing preferred routes will result in fewer traffic delays and will better provide for efficient departure, en route and arrival air traffic service.

The following lists contain preferred IFR routes for the low altitude stratum and the high altitude stratum. The high altitude list is in two sections; the first section showing terminal to terminal routes and the second section showing preferred direction route segments. Also, on some high altitude routes low altitude airways are included as transition routes.

The following will explain the terms/abbreviations used in the listing:

1. Preferred routes beginning/ending with an airway number indicate that the airway essentially overlies the airport and flight are normally cleared directly on the airway.
2. Preferred IFR routes beginning/ending with a fix indicate that aircraft may be routed to/from these fixes via a Standard Instrument Departure (SID) route, radar vectors (RV), or a Standard Terminal Arrival Route (STAR).
3. Preferred IFR routes for major terminals selected are listed alphabetically under the name of the departure airport. Where several airports are in proximity they are listed under the principal airport and categorized as a metropolitan area; e.g., New York Metro Area.
4. Preferred IFR routes used in one direction only for selected segments, irrespective of point of departure or destination, are listed numerically showing the segment fixes and the direction and times effective.
5. Where more than one route is listed the routes have equal priority for use.
6. Official location identifiers are used in the route description for VOR/VORTAC nav aids.
7. Intersection names are spelled out.
8. Navaid and distance fixes (e.g., ARD201113) have been used in the route description in an expediency and intersection names will be assigned as soon as routine processing can be accomplished. Navaid radial (no distance stated) may be used to describe a route to intercept a specified airway (e.g., MIV MIV101 V39); another navaid radial (e.g., UIM UIM255 GSW081); or an intersection (e.g., GSW081 FITCH).
9. Where two nav aids, an intersection and a navaid, a navaid and a navaid radial and distance point, or any navigable combination of these route descriptions follow in succession, the route is direct.
10. The effective times for the routes are in UTC. During periods of daylight saving time effective times will be one hour earlier than indicated. All states observe daylight saving time except Arizona, Puerto Rico and the Virgin Islands. Pilots planning flight between the terminals or route segments listed should file for the appropriate preferred IFR route.
11. (90–170 incl) altitude flight level assignment in hundred of feet.
12. The notations "pressurized" and "unpressurized" for certain low altitude preferred routes to Kennedy Airport indicate the preferred route based on aircraft performance.
13. All Preferred IFR Routes are in effect continuously unless otherwise noted.
14. Use current SIDs and STARs for flight planning.
15. For high altitude routes, the portion of the routes contained in brackets [ ] is suggested but optional. The portion of the route outside the brackets will likely be required by the facilities involved.

## SPECIAL LOW ALTITUDE PREFERRED DIRECTION ROUTES

Terminals	Route	Effective Times (UTC)
TRAFFIC FROM NORTH TERMINATING AT MCMINNVILLE AURORA STATE & HILLSBORO, OR (17000 AND BELOW)		
SOUTHBOUND.....	LOATH V165 UBG.....	1400–0700
TRAFFIC FROM THE EUGENE, OR AREA (PROPS/TURBOPROPS; 17000 AND BELOW)		
NORTHBOUND.....	EUG V481 CVO V495 UBG.....	1400–0700
SOUTHBOUND.....	EUG V448 OED.....	1400–0700
TRAFFIC OVERFLYING THE PORTLAND, OR AREA (15000 AND BELOW)		
NORTHBOUND.....	UBG V165 OLM.....	1400–0700
SOUTHBOUND.....	OLM V165 UBG.....	1400–0700
TRAFFIC OVERFLYING THE SEATTLE, WA AREA (10000 TO 15000)		
EASTBOUND V4.....	SEA V2.....	1400–0700
SOUTHBOUND.....	NUW DIGGN V495 SEA HELNS-STAR.....	1400–0700
SOUTHBOUND.....	NUW JAWBN V495 ALDER BTG.....	1400–0700
SOUTHBOUND.....	NUW JAWBN V495 ALDER EUG.....	1400–0700
SOUTHBOUND.....	PAE SEA V495 ALDER EUG.....	1400–0700
SOUTHBOUND V165.....	V495.....	1400–0700
SOUTHBOUND V23.....	V165 DIGGN V495.....	1400–0700
TRAFFIC OVERFLYING THE SEATTLE, WA AREA (9000 AND BELOW)		
EASTBOUND.....	HQM SANDR V27 SEA V2 ELN.....	
EASTBOUND.....	NUW JAWBN V4 SEA V2 ELN.....	1400–0700
NORTHBOUND.....	OLM V165 DIGGN.....	1400–0700

NW, 25 JAN 2024 to 21 MAR 2024

PREFERRED IFR ROUTES

Terminals	Route	Effective Times (UTC)
SOUTH/SOUTHWEST BND.....	NUW DIGGN V165 UBG.....	1400-0700
SOUTH/SOUTHWEST BND.....	V165 .....	1400-0700
SOUTHBOUND .....	DIGGN V165 OLM .....	1400-0700
SOUTHBOUND .....	PAE V287 OLM.....	1400-0700
WESTBOUND .....	YKM V298 SEA.....	1400-0700
TRAFFIC OVERFLYING THE SEATTLE, WA AREA LANDING IN PDX AREA (10000 TO 15000)		
SOUTHBOUND V165 .....	V495 SEA HELNS-STAR.....	1400-0700
SOUTHBOUND V23 .....	V165 DIGGN V495 SEA HELNS-STAR.....	1400-0700
TRAFFIC OVERFLYING THE SEATTLE, WA AREA LANDING IN PDX AREA (9000 AND BELOW)		
SOUTHBOUND .....	NUW DIGGN V165 LOATH BTG.....	1400-0700

HIGH ALTITUDE

Terminals	Route	Effective Times (UTC)
<b>BOISE(BOI)</b>		
CHICAGO(ORD).....	(FL240 AND ABOVE-JETS)DPR J16 MCW JANESVILLE-STAR .....	
	or	
	DPR J16 MCW ZZIPR FYTTE (RNAV)-STAR .....	
<b>PORTLAND(PDX)</b>		
BURBANK(BUR) .....	(FL240 AND ABOVE; ALL RNAV)JOGEN Q7 AVE HIHWY ROKKR (RNAV)-STAR.....	
CHICAGO(ORD).....	(FL240 AND ABOVE; ALL RNAV)PDT J16 MCW ZZIPR FYTTE (RNAV)-STAR .....	
DETROIT(DTW).....	(DME/DME/IRU OR GPS REQUIRED)(DTW NORTH FLOW)PDT J16 HIA BZN BIL J34 BAE PORZL KKISS (RNAV)-STAR.....	
	or	
	(DME/DME/IRU OR GPS REQUIRED)(DTW SOUTH FLOW)PDT J16 HIA BZN BIL J34 BAE PORZL RKCTY (RNAV)-STAR.....	
HOUSTON(HOU).....	(FL240 AND ABOVE; ALL RNAV)IMB J15 BOI MTU HBU PNH MQP ELLVR NNEAL KIDDZ (RNAV)-STAR...	
HOUSTON(IAH).....	(FL240 AND ABOVE; ALL RNAV)(IAH WEST FLOW)IMB J15 BOI MTU HBU PNH MQP DRLLR (RNAV)-STAR	
	or	
	(FL240 AND ABOVE; ALL RNAV)(IAH EAST FLOW)IMB J15 BOI MTU HBU PNH MQP GUSHR (RNAV)-STAR	
LONG BEACH(LGB) .....	(FL240 AND ABOVE; TURBOJETS)SMIGE Q9 REBRG PCIFC (RNAV)-STAR.....	
LOS ANGELES(LAX).....	(FL240 AND ABOVE)JOGEN Q7 JAGWA BURGL IRNMN (RNAV)-STAR.....	
ONTARIO(ONT) .....	(FL240 AND ABOVE)PAWLI Q11 PUSHH PASKE TTE ZIGGY-STAR .....	
SAN DIEGO(SAN) .....	PAWLI Q11 PAAGE HUULK COMIX (RNAV)-STAR ...	
SANTA ANA(SNA) .....	(FL240 AND ABOVE)SMIGE Q9 REBRG OHSEA (RNAV)-STAR.....	
VAN NUYS(VNY) .....	SMIGE Q9 REBRG IVINS (RNAV)-STAR .....	
<b>SEATTLE(BFI)</b>		
BURBANK(BUR) .....	(FL240 AND ABOVE)SUMMA Q9 REBRG ROKKR (RNAV)-STAR.....	
LONG BEACH(LGB) .....	(FL240 AND ABOVE)SUMMA Q9 REBRG PCIFC (RNAV)-STAR.....	
LOS ANGELES(LAX).....	(FL240 AND ABOVE)SUMMA JINMO Q7 JAGWA BURGL IRNMN (RNAV)-STAR.....	
OAKLAND(OAK) .....	(FL240 AND ABOVE)JJAMM ELMAA HISKU Q5 HUPTU SPAMY WNSDR (RNAV)-STAR .....	1300-0600
ONTARIO(ONT) .....	(FL240 AND ABOVE)SUMMA PAAGE Q11 PUSHH PASKE LANDO PMD ZIGGY-STAR .....	
PALM SPRINGS(PSP) .....	(FL240 AND ABOVE)SUMMA PAAGE PUSHH PASKE OYVEY SIZLR (RNAV)-STAR .....	
SAN DIEGO(SAN) .....	(FL240 AND ABOVE)SUMMA PAAGE Q11 PASKE HUULK COMIX (RNAV)-STAR.....	

# PREFERRED IFR ROUTES

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Terminals	Route	Effective Times (UTC)
SAN FRANCISCO(SFO) .....	(FL240 AND ABOVE)JJAMM ELMAA ERAVE Q1 ETCHY MLBEC BDEGA (RNAV)-STAR .....	1300-0600
SAN JOSE(SJC) .....	(FL240 AND ABOVE)JJAMM ELMAA FAMUK Q3 FINER CHBLI BRIXX (RNAV)-STAR .....	1300-0600
SANTA ANA(SNA) .....	(FL240 AND ABOVE)SUMMA Q9 REBRG OHSEA (RNAV)-STAR .....	
SANTA MONICA(SMO) .....	(FL240 AND ABOVE)SUMMA Q9 SUNBE FRA REBRG BONJO (RNAV)-STAR .....	
VAN NUYS(VNY) .....	(FL240 AND ABOVE)SUMMA Q9 SUNBE FRA REBRG IVINS (RNAV)-STAR .....	
<b>SEATTLE(SEA)</b>		
ANCHORAGE(ANC) .....	(16000 AND ABOVE)(NORTHBOUND)PANGL YZT J502 ANN J195 BKA LAIRE J133 HUMPY JOH .....	
	or	
AUSTIN(AUS) .....	(16,000 AND ABOVE)ARRIE PRYCE BKA LAIRE JOH SUMMA-DP SUMMA J54 BKE BOI MTU CIM TXO SLIDE UCOKA DILLO LAIKS (RNAV)-STAR .....	
BEDFORD(BED) .....	HANKK Q935 PONCT EEGUL ZELKA (RNAV)-STAR .	
BOSTON(BOS) .....	HANKK Q935 PONCT JFUND (RNAV)-STAR .....	
BURBANK(BUR) .....	(FL240 AND ABOVE)SUMMA Q9 REBRG ROKKR (RNAV)-STAR .....	
CHICAGO(ORD) .....	(FL240 AND ABOVE; ALL RNAV)NORMY J90 HLN RECAP DPR J16 FSD ZZIPR FYTTE (RNAV)-STAR (RNAV TURBOJET)BAE OLYEE BRWNZ (RNAV)-STAR	
CLEVELAND METRO(CLE, CGF, BKL, LNN, LPR) .....	(DME/DME/IRU OR GPS REQUIRED)(DTW NORTH FLOW)NORMY J70 BAE PORZL RKCTY (RNAV)-STAR	
	or	
	(DME/DME/IRU OR GPS REQUIRED)(DTW SOUTH FLOW)NORMY J70 BAE PORZL RKCTY (RNAV)-STAR	
HOUSTON(HOU) .....	(FL240 AND ABOVE; RNAV TURBOJET)SUMMA J54 BKE BOI J15 JNC ALS PNH MQP ELLVR NNEAL KIDDZ (RNAV)-STAR .....	
HOUSTON(IAH) .....	(FL240 AND ABOVE; ALL RNAV)(IAH EAST FLOW)SUMMA J54 BKE BOI J15 JNC ALS PNH MQP GUSHR (RNAV)-STAR .....	
	or	
	(FL240 AND ABOVE; ALL RNAV)(IAH WEST FLOW)SUMMA J54 BKE BOI J15 JNC ALS PNH MQP DRLLR (RNAV)-STAR .....	
LONG BEACH(LGB) .....	(FL240 AND ABOVE)SUMMA Q9 REBRG PCIFC (RNAV)-STAR .....	
LOS ANGELES(LAX) .....	(FL240 AND ABOVE)SUMMA JINMO Q7 JAGWA BURGL IRNMN (RNAV)-STAR .....	
NEW YORK(JFK) .....	NORMY J90 HLN GEP DLL HASTE DAFLU J70 LVZ LENDY-STAR .....	
NEWARK(EWR) .....	NORMY J90 ABR J70 GEP ODI KG78K KG72M EVOTE NELLS KEEHO J584 SLT WILLIAMSPORT-STAR ..	
OAKLAND(OAK) .....	(FL240 AND ABOVE; ALL RNAV)HAROB Q5 HUPTU SPAMY WNSDR (RNAV)-STAR .....	1300-0600
ONTARIO(ONT) .....	(FL240 AND ABOVE)SUMMA PAAGE Q11 PASKE TTE ZIGGY-STAR .....	
SAN DIEGO(SAN) .....	(FL240 AND ABOVE)SUMMA PAAGE Q11 PASKE HUULK COMIX (RNAV)-STAR .....	
SAN FRANCISCO(SFO) .....	(FL240 AND ABOVE; ALL RNAV)ERAVE Q1 ETCHY MLBEC BDEGA (RNAV)-STAR .....	1300-0600
SAN JOSE(SJC) .....	(FL240 AND ABOVE; ALL RNAV)FEPOT Q3 FINER CHBLI BRIXX (RNAV)-STAR .....	1300-0600
SANTA ANA(SNA) .....	(FL240 AND ABOVE)SUMMA Q9 REBRG OHSEA (RNAV)-STAR .....	
VAN NUYS(VNY) .....	SUMMA Q9 REBRG IVINS (RNAV)-STAR .....	
<b>SPOKANE(GEG)</b>		
CHICAGO(ORD) .....	(FL240 AND ABOVE; ALL RNAV)MLP J70 LWT MLS J204 DPR J16 MCW ZZIPR FYTTE (RNAV)-STAR .....	

PREFERRED IFR ROUTES

SPECIAL HIGH ALTITUDE PREFERRED DIRECTION ROUTES

Terminals	Route	Effective Times (UTC)
(TURBOJET)		
EASTBOUND .....	FAM TERGE RINTE KLYNE Q29 WWSHR DORET J584 SLT WILLIAMSPORT-STAR.....	1100-0300
EASTBOUND .....	FAM TERGE RINTE KLYNE Q29 WWSHR JHW J70 LVZ LENDY-STAR .....	1100-0300
EASTBOUND .....	FAM TERGE RINTE KLYNE Q29 WWSHR JHW WILKES-BARRE-STAR.....	1100-0300
EASTBOUND .....	FAM TERGE RINTE KLYNE Q29 WWSHR TEESY J146 ETG MILTON-STAR .....	1100-0300
EASTBOUND .....	GEP DLL GERBS J146 ETG MILTON-STAR .....	1100-0300
EASTBOUND .....	GEP DLL HASTE DAFLU J70 JHW WILKES-BARRE-STAR	1100-0300
EASTBOUND .....	GEP DLL HASTE DAFLU J70 LVZ LENDY-STAR.....	1100-0300
EASTBOUND .....	GEP ODI KG78K KG72M EVOTE NELS KEEHO J584 SLT WILLIAMSPORT-STAR .....	1100-0300
EASTBOUND .....	OVR DSM EVOTE NELS KEEHO J584 SLT WILLIAMSPORT-STAR .....	1100-0300
EASTBOUND .....	SPI KOLTS WWODD RINTE KLYNE Q20 WWSHR TEESY J146 ETG MILTON-STAR .....	1100-0300
EASTBOUND .....	SPI KOLTS WWODD RINTE KLYNE Q29 WWSHR DORET J584 SLT WILLIAMSPORT-STAR .....	1100-0300
EASTBOUND .....	SPI KOLTS WWODD RINTE KLYNE Q29 WWSHR JHW J70 LVZ LENDY-STAR .....	1100-0300
EASTBOUND .....	SPI KOLTS WWODD RINTE KLYNE Q29 WWSHR JHW WILKES-BARRE-STAR.....	1100-0300
EASTBOUND .....	SUX DBQ HASTE DAFLU J70 JHW WILKES-BARRE-STAR.....	1100-0300
EASTBOUND .....	SUX DBQ KG75M DAFLU J70 LVZ LENDY-STAR....	1100-0300
(TURBOJETS)		
SW BND.....	MLF STEWW CHOWW (RNAV)-STAR .....	1300Z-0600 Z
TRAFFIC ARR SEA FROM NW OVERFLYING VANCOUVER ACC FILE YYJ OR TOU TRANSITION (NON-RNAV EQUIPPED)		
NORTHWEST .....	TOU JAWBN-STAR .....	
NORTHWEST .....	YYJ JAWBN-STAR .....	
TRAFFIC ARR SEA FROM NW OVERFLYING VANCOUVER ACC FILE YYJ OR TOU TRANSITION (RNAV EQUIPPED)		
NORTHWEST .....	TOU MARNR (RNAV)-STAR .....	
NORTHWEST .....	YYJ MARNR (RNAV)-STAR .....	
TRAFFIC ARRIVING SALT LAKE CITY TERMINAL AREA		
EAST OVER OCS .....	OCS BRIGHAM CITY-STAR .....	
NORTH OVER DBS.....	DBS BRIGHAM CITY-STAR .....	
NORTH OVER JAC.....	PIH BEARR-STAR.....	
NORTHEAST OVER JAC.....	JAC BRIGHAM CITY-STAR .....	
NORTHWEST OVER BYI.....	BYI BEARR-STAR .....	

HIGH ALTITUDE—PREFERRED DIRECTION ROUTES

Airway	Segment Fixes	Direction Effective	Effective Times (UTC)
Q1.....	ELMAA, WA to POINT REYES, CA.....	S BND	1300-0600
Q3.....	FEPOP, WA to POINT REYES, CA .....	S BND	1300-0600
Q5.....	HAROB, WA to STIKM, CA.....	S BND	1300-0600
Q7.....	JINMO, WA to AVENAL, CA .....	S BND	1300-0600
Q9.....	SUMMA, WA to REBRG, CA.....	S BND	1300-0600
Q11.....	PAAGE, WA to LOS ANGELES, CA .....	S BND	1300-0600

MINIMUM OPERATIONAL NETWORK (MON) AIRPORT LISTING




STATE CITY		AIRPORT NAME	LOCATION IDENTIFIER
ID	LEWISTON	LEWISTON/NEZ PERCE COUNTY	LWS
ID	TWIN FALLS	JOSLIN FIELD/MAGIC VALLEY RGNL	TWF
MT	BOZEMAN	BOZEMAN YELLOWSTONE INTL	BZN
MT	CUT BANK	CUT BANK INTL	CTB
MT	DILLON	DILLON	DLN
MT	GLASGOW	WOKAL FIELD/GLASGOW - VALLEY COUNTY	GGW
MT	HAVRE	HAVRE CITY-COUNTY	HVR
MT	HELENA	HELENA RGNL	HLN
MT	LEWISTOWN	LEWISTOWN MUNI	LWT
MT	MILES CITY	FRANK WILEY FIELD	MLS
OR	AURORA	AURORA STATE	UAO
OR	BAKER CITY	BAKER CITY MUNI	BKE
OR	BURNS	BURNS MUNI	BNO
OR	MEDFORD	ROGUE VALLEY INTL - MEDFORD	MFR
OR	PORTLAND	PORTLAND-HILLSBORO	HIO
OR	REDMOND	ROBERTS FIELD	RDM
OR	SALEM	MCNARY FLD	SLE
WA	EPHRATA	EPHRATA MUNI	EPH
WA	RICHLAND	RICHLAND	RLD
WA	SPOKANE	SPOKANE INTL	GEG
WA	TACOMA	TACOMA NARROWS	TIW
WY	CHEYENNE	CHEYENNE RGNL/JERRY OLSON FIELD	CYS
WY	DOUGLAS	CONVERSE COUNTY	DGW
WY	EVANSTON	EVANSTON-UINTA COUNTY BURNS FIELD	EVW
WY	JACKSON	JACKSON HOLE	JAC
WY	RIVERTON	CENTRAL WYOMING RGNL	RIW
WY	SHERIDAN	SHERIDAN COUNTY	SHR

In support of the Federal Aviation Administration's Runway Incursion Program, selected towered airport diagrams have been published in the Airport Diagram section of the Chart Supplement. Diagrams will be listed alphabetically by associated city and airport name. Airport diagrams, depicting runway and taxiway configurations, will assist both VFR and IFR pilots in ground taxi operations. The airport diagrams in this publication are the same as those published in the U.S. Terminal Procedures Publications. For additional airport diagram legend information see the U.S. Terminal Procedures Publication.

NOTE: Some text data published under the individual airport in the front portion of the Chart Supplement section may be more current than the data published on the Airport Diagrams. The airport diagrams are updated only when significant changes occur.

PILOT CONTROLLED AIRPORT LIGHTING SYSTEMS

Available pilot controlled lighting (PCL) systems are indicated as follows:

- 1. Approach lighting systems that bear a system identification are symbolized using negative symbology, e.g., , , .
  - 2. Approach lighting systems that do not bear a system identification are indicated with a negative "0" beside the name.
- A star (★) indicates non-standard PCL, consult Chart Supplement, e.g., 0★

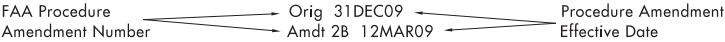
To activate lights, use frequency indicated in the communication section of the chart with a 0 or the appropriate lighting system identification e.g., UNICOM 122.8 0, , .

KEY MIKE	FUNCTION
7 times within 5 seconds	Highest intensity available
5 times within 5 seconds	Medium or lower intensity (Lower REIL or REIL-off)
3 times within 5 seconds	Lowest intensity available (Lower REIL or REIL-off)

CHART CURRENCY INFORMATION

Date of Latest Revision 09365

The Date of Latest Revision identifies the Julian date the chart was added or last revised for any reason. The first two digits indicate the year, the last three digits indicate the day of the year (001 to 365/6) in which the latest revision of any kind has been made to the chart.



The FAA Procedure Amendment Number represents the most current amendment of a given procedure. The Procedure Amendment Effective Date represents the AIRAC cycle date on which the procedure amendment was incorporated into the chart. Updates to the amendment number & effective date represent procedural/criteria revisions to the charted procedure, e.g., course, fix, altitude, minima, etc.

NOTE: Inclusion of the "Procedure Amendment Effective Date" will be phased in as procedures are amended. As this occurs, the Julian date will be relocated to the upper right corner of the chart.

MISCELLANEOUS

- ★ Indicates a non-continuously operating facility, see Chart Supplement.
- For Civil (FAA) instrument procedures, "RADAR REQUIRED" in the planview of the chart indicates that ATC radar must be available to assist the pilot when transitioning from the en route environment. "Radar required" in the pilot briefing portion of the chart indicates that ATC radar is required on portions of the procedure outside the final approach segment, including the missed approach. Some military procedures also have equipment requirements such as "Radar Required", but do not conform to the same charting application standards used by the FAA. Distances in nautical miles (except visibility in statute miles and Runway Visual Range in hundreds of feet). Runway Dimensions in feet. Elevations in feet. Mean Sea Level (MSL). Ceilings in feet above airport elevation. Radials/ bearings/headings/courses are magnetic. Horizontal Datum: Unless otherwise noted on the chart, all coordinates are referenced to North American Datum 1983 (NAD 83), which for charting purposes is considered equivalent to World Geodetic System 1984 (WGS 84).

Terrain is scaled within the neat lines (planview boundaries) and does not accurately underlie not-to-scale distance depictions or symbols.



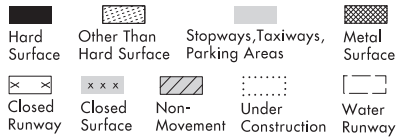
24025

LEGEND

INSTRUMENT APPROACH PROCEDURES (CHARTS)

AIRPORT DIAGRAM/AIRPORT SKETCH

Runways

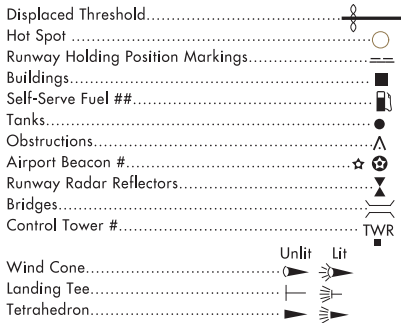


ARRESTING GEAR: Specific arresting gear systems; e.g., BAK12, MA-1A etc., shown on airport diagrams, not applicable to Civil Pilots. Military Pilots refer to appropriate DOD publications.



ARRESTING SYSTEM (EMAS)

REFERENCE FEATURES



# When Control Tower and Rotating Beacon are co-located, Beacon symbol will be used and further identified as TWR.

## See appropriate Chart Supplement for information.

Runway Weight Bearing Capacity or Pavement Classification Number (PCN)/Pavement Classification Rating (PCR) is shown as a codified expression. Refer to the appropriate Supplement/Directory for applicable codes e.g., RWY 14-32 PCR 560 R/B/W/T; S-75, D-185, 2D-325, 2D/2D2-1120

Helicopter Alighting Areas (H) (H) (H) (H) (H)

Negative Symbols used to identify Copter Procedures landing point..... (H) (H) (H) (H) (H)

NOTE: Landmark features depicted on Copter Approach insets and sketches are provided for visual reference only.

Runway TDZ elevation.....TDZE 123

Runway Slope..... 0.3% Down.....0.8% UP (shown when rounded runway slope is  $\geq 0.3\%$ )

NOTE: Runway Slope measured to midpoint on runways 8000 feet or longer.

U.S. Navy Optical Landing System (OLS) "OLS" location is shown because of its height of approximately 7 feet and proximity to edge of runway may create an obstruction for some types of aircraft.

Approach light symbols are shown in the Flight Information Handbook.

Airport diagram scales are variable.

True/magnetic North orientation may vary from diagram to diagram

Coordinate values are shown in 1 or 1/2 minute increments. They are further broken down into 6 second ticks, within each 1 minute increments.

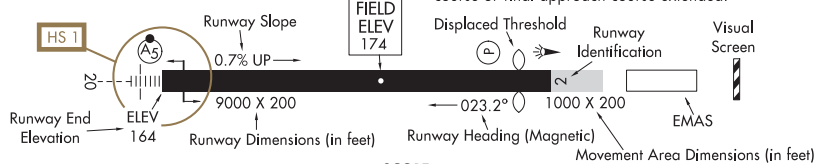
Positional accuracy within  $\pm 600$  feet unless otherwise noted on the chart.

Runway length depicted is the physical length of the runway (end-to-end, including displaced thresholds if any) but excluding areas designated as stopways.

A (D) symbol is shown to indicate runway declared distance information available, see appropriate Chart Supplement for distance information.

NOTE: All new and revised airport diagrams are shown referenced to the World Geodetic System (WGS) (noted on appropriate diagram), and may not be compatible with local coordinates published in DoD FLIP. (Foreign Only)

The airport sketch box includes the final approach course or final approach course extended.



SCOPE

Airport diagrams are specifically designed to assist in the movement of ground traffic at locations with complex runway/taxiway configurations. Airport diagrams are not intended to be used for approach and landing or departure operations. For revisions to Airport Diagrams: Consult FAA Order 7910.4.

LEGEND

## HOT SPOTS

An "Airport surface hot spot" is a location on an aerodrome movement area with a history or potential risk of collision or runway incursion, and where heightened attention by pilots/drivers is necessary.

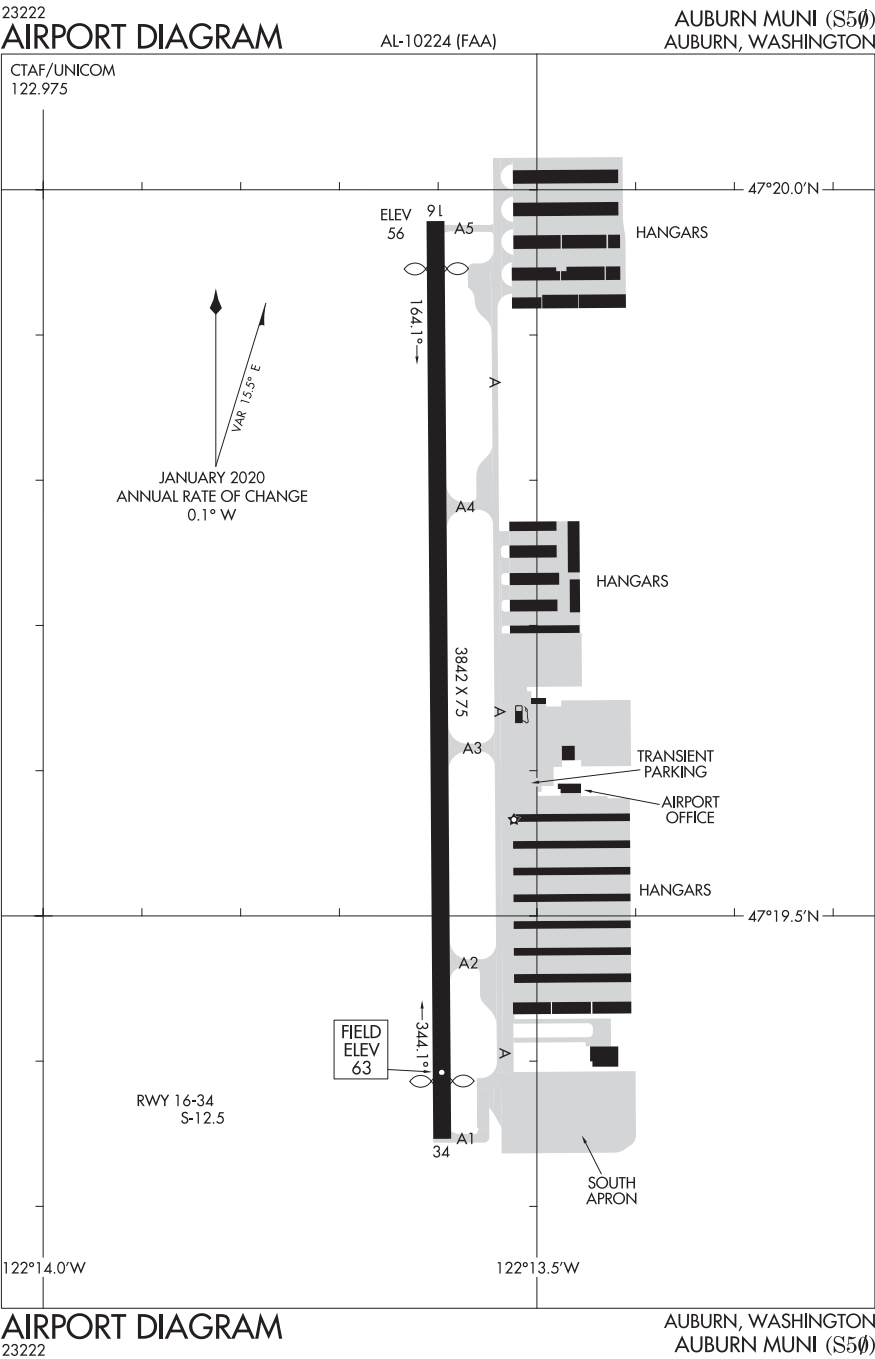
A "hot spot" is a runway safety related problem area on an airport that presents increased risk during surface operations. Typically it is a complex or confusing taxiway/taxiway or taxiway/runway intersection. The area of increased risk has either a history of or potential for runway incursions or surface incidents, due to a variety of causes, such as but not limited to: airport layout, traffic flow, airport marking, signage and lighting, situational awareness, and training. Hot spots are depicted on airport diagrams as open circles or polygons designated as "HS 1", "HS 2", etc. and tabulated in the list below with a brief description of each hot spot. Hot spots will remain charted on airport diagrams until such time the increased risk has been reduced or eliminated.

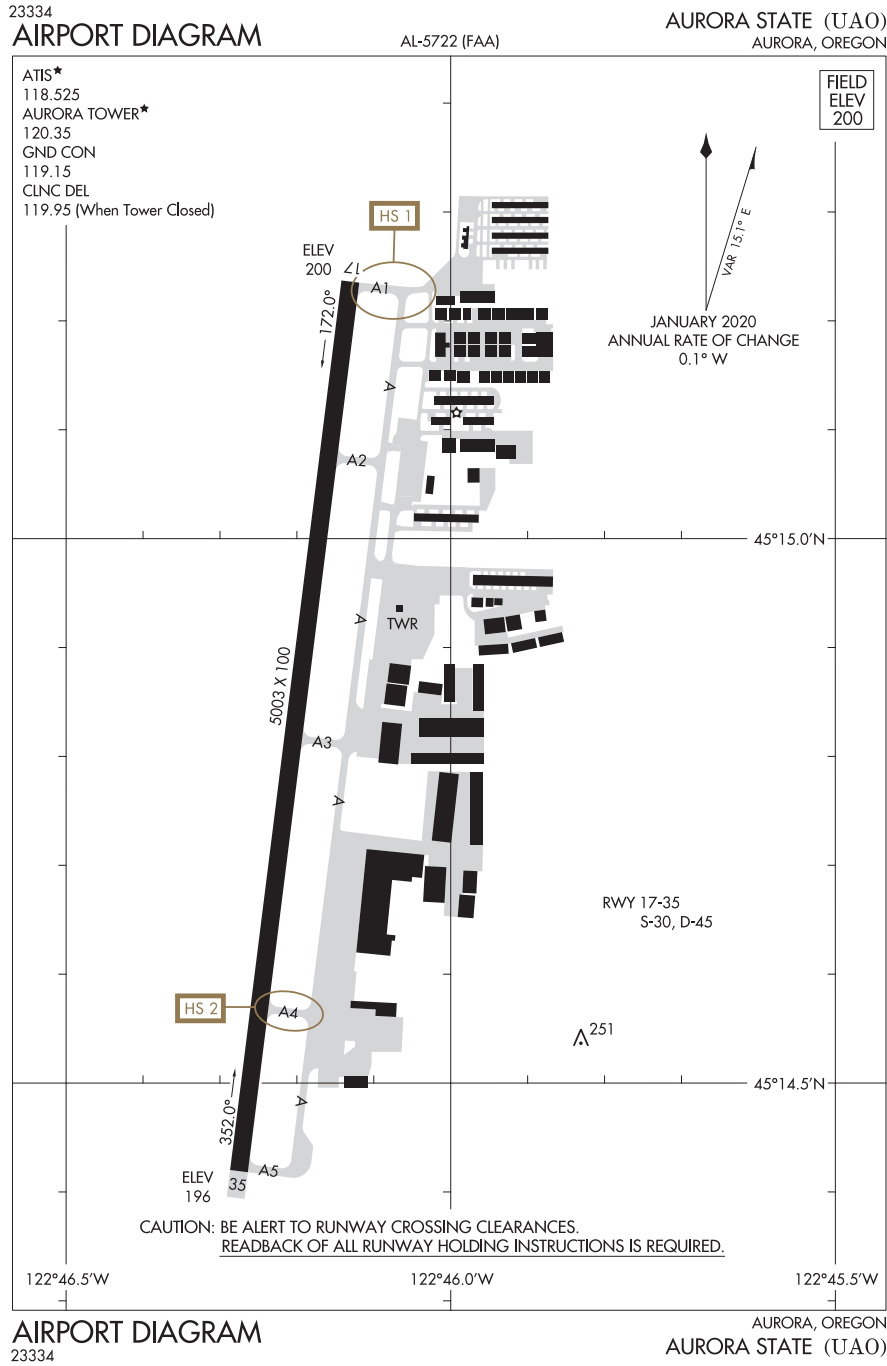
CITY/AIRPORT	HOT SPOT	DESCRIPTION
<b>IDAHO</b>		
BOISE		
BOISE AIR TRML/GOWEN FLD (BOI)	HS 1	Pilots departing Rwy 10L often miss the left turn on Twy W and continue taxi on Twy J. Do not mistake Rwy 10L apch sign for Rwy 10L entrance.
HAILEY		
FRIEDMAN MEML (SUN)	HS 1	Possible confusion btn ramp and Twy B due to large paved areas. ATC clnc is needed to enter movement area.
	HS 2	Possible confusion btn ramp and Twy B due to large paved areas. ATC clnc is needed to enter movement area.
	HS 3	Possible confusion btn ramp and Twy B due to large paved areas. ATC clnc is needed to enter movement area.
IDAHO FALLS		
IDAHO FALLS RGNL (IDA)	HS 1	Pilots should use caution and look carefully for rwy hold line when using Twy C. Rwy 17–35 does not have rwy edge markings and can be mistaken for a twy.
TWIN FALLS		
JOSLIN FLD/MAGIC VALLEY RGNL (TWF)	HS 1	Confusing ramp and twy configuration. Pilots taxiing from FBO ramp sometimes enter Rwy 12–30 w/o apvl.
	HS 2	Twy A at Twy A3, confusing geometry and painted lines. ATCT clnc required to cross the painted movement – non-movement bdry marking. Pilots sometimes enter Rwy 08–26 w/o apvl.
<b>MONTANA</b>		
BILLINGS		
BILLINGS LOGAN INTL (BIL)	HS 1	Complex intersection of Twy A, Twy C, ramp, and Rwy 10L–28R. Large non-movement area south of Twy A.
BOZEMAN		
BOZEMAN YELLOWSTONE INTL (BZN)	HS 1	Pilots taxiing via Twy A to Rwy 30 for departure sometimes fail to hold short of Rwy 03–21.
BUTTE		
BERT MOONEY (BTM)	HS 1	Rstd visibility between Rwy 33 and Rwy 30. Acft departing/lbg may not see tfc on intersecting rwy.
<b>OREGON</b>		
AURORA		
AURORA STATE (UAO)	HS 1	Rwy hold line close to Twy A. No sign identifying Twy A when exiting the ramp.
	HS 2	Rwy hold line close to Twy A. No sign identifying Twy A when exiting the ramp.
NORTH BEND		
SOUTHWEST OREGON RGNL (OTH)	HS 1	Twy A crosses the north end of Rwy 13–31. Pilots have mistaken the rwy as part of the twy and taxied onto Rwy 13–31 without clearance.
PENDLETON		
EASTERN OREGON RGNL AT PENDLETON (PDT)	HS 1	The hold line for Rwy 29 extends across a portion of the ramp and is approximately 360' long. The signs are difficult to see from some spots on the ramp.

CITY/AIRPORT	HOT SPOT	DESCRIPTION
PORTLAND		
PORTLAND INTL (PDX)	HS 1	Limited wing-tip clearance at twy convergence point. Pilots taxiing eastbound on Twy B should hold at the twy holding position marking when directed by ATC.
	HS 2	Hold line for Rwy 03-21 is on Twy K. Pilots should be prepared to hold short of Rwy 21 on Twy K unless an authorization to cross has been issued by ATC.
	HS 3	Pilots taxiing outbd from the GA ramp via Twy A3 sometimes miss the turn onto Twy A and enter Rwy 10L-28R w/o authorization.
PORTLAND		
PORTLAND-HILLSBORO (HIO)	HS 1	A/cft exiting Rwy 13R-31L at Twy A6 have only 90' of clnc between Twy A cntrln and holding posn markings.
	HS 2	Pilots taxiing from the Rwy 31L run-up area via Twy A8 to Rwy 31L for dep sometimes fail to hold short of Rwy 13R-31L.
REDMOND		
ROBERTS FLD (RDM)	HS 1	Pilots eastbound on Twy B sometimes miss the turn onto Twy A and cross the Rwy 05-23 hold line.
	HS 2	Pilots eastbound on Twy C sometimes miss the turn onto Twy A and cross the Rwy 05-23 hold line.
<b>WASHINGTON</b>		
BELLINGHAM		
BELLINGHAM INTL (BLI)	HS 1	Confusing twy int for pilots exiting/taxiing Rwy 16-34 via Twy D.
EVERETT		
SEATTLE PAINE FLD INTL (PAE)	HS 1	Twy A between Twy A9 and Twy A10 not visible from ATCT.
	HS 2	Enter Rwy 16 full len via Twy A1 unless Twy AA specified by ATC.
FORT LEWIS/TACOMA		
GRAY AAF (JOINT BASE LEWIS-MCCHORD) (GRF)	HS 1	Congested int of Twy E, Twy F and Twy G.
MOSES LAKE		
GRANT CO INTL (MWH)	HS 1	Unusual hold line location on Twy C, 1568' short of Rwy 18 Thld.
	HS 2	Rwy 09-27 clsd except mil ops. Rwy 09-27 has no rwy markings and NSTD rwy lgts.
OLYMPIA		
OLYMPIA RGNL (OLM)	HS 1	Rwy 8-26 intersects Rwy 17-35.
PASCO		
TRI-CITIES (PSC)	HS 1	Pilots ldg Rwy 30 should listen carefully to ATCT instructions and be prepared to exit onto Rwy 03R-21L or Rwy 03L-21R. Pilots often exit at the wrong rwy as directions signs are not avbl.
	HS 2	Pilots sometimes cross Rwy 21L without authorization. When twr is opr, ATC clearance is required to enter or cross rwy.
SEATTLE		
BOEING FLD/KING CO INTL (BFI)	HS 1	Twy Z restricted access area.
	HS 2	Rwy 14R-32L and Twy A9. Wrong rwy departure risk.
	HS 3	Extv copter ops in the vcnty of Twy B5.
SEATTLE		
SEATTLE-TACOMA INTL (SEA)	HS 1	A/cft taxiing to Rwy 34C at Twy Q for departure sometimes enter Rwy 34R w/o authorization after reading back hold short instructions. Rwy 34R hold position is only 275' from the ramp and movement area boundary.
	HS 2	A/cft crossing/exiting Rwy 16C-34C at Twy J sometimes cross Rwy 16L-34R hold line on Twy H w/o authorization. Hold line immediately after joining Twy H.
YAKIMA		
YAKIMA AIR TRML/MCALLISTER FLD (YKM)	HS 1	Twy C, Twy B, and Rwy 22 complex intersection. Rwy hold lines are at an unusual distance from rwy edge, rwy markings not easily visible from hold line.

AIRPORT DIAGRAMS

CITY/AIRPORT	HOT SPOT	DESCRIPTION
WYOMING		
CASPER CASPER/NATRONA CO INTL (CPR)	HS 1	Pilots sometimes taxi past Twy A onto Rwy 03–21 without authorization. Twy A on edge of ramp with no signage, and Twy A5 has direct access to Rwy from ramp.
CHEYENNE CHEYENNE RGNL/JERRY OLSON FLD (CYS)	HS 1	Confusing twy configuration. Twy A transitions to Twy B and back to Twy A when taxiing to and from Rwy 13–31.
JACKSON JACKSON HOLE (JAC)	HS 1	Acft sometimes miss Twy A1 and enter the blast pad.



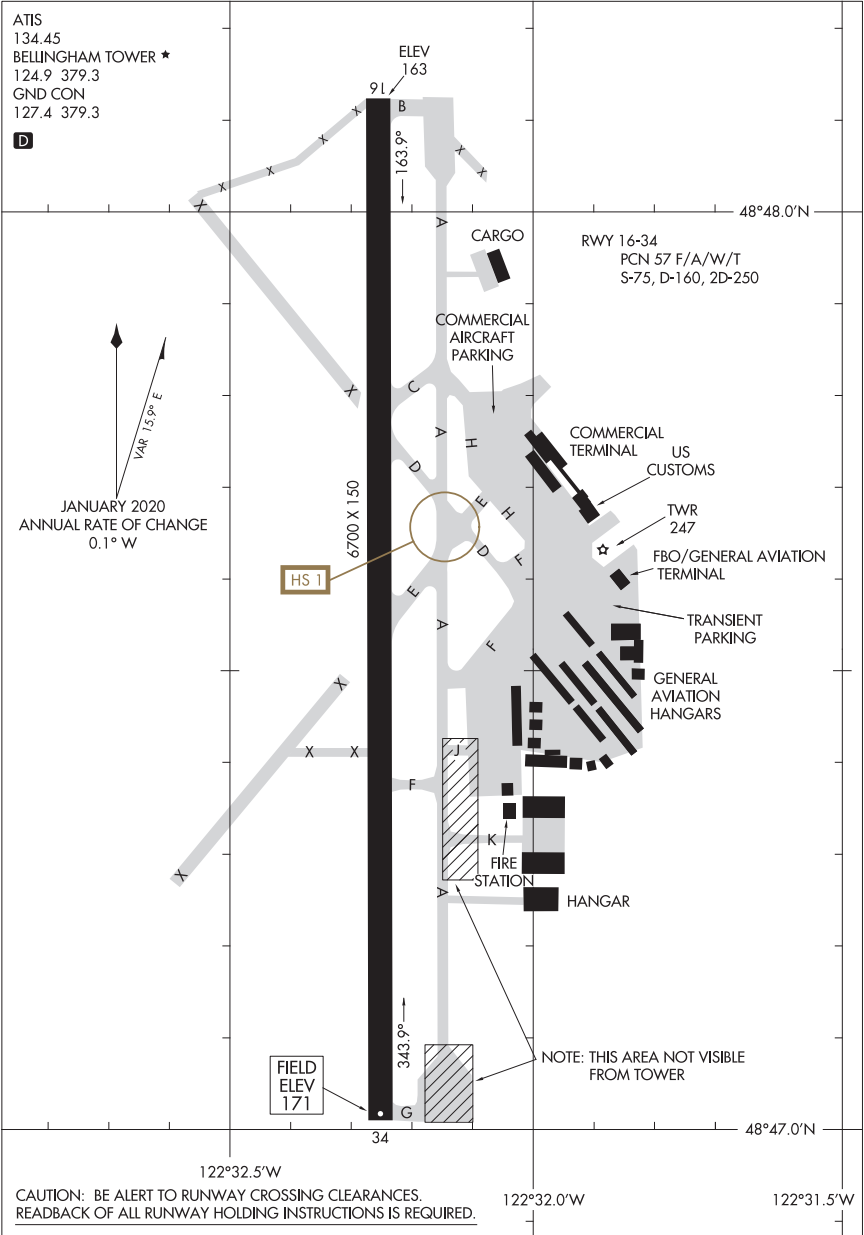


22363

AIRPORT DIAGRAM

AL-45 (FAA)

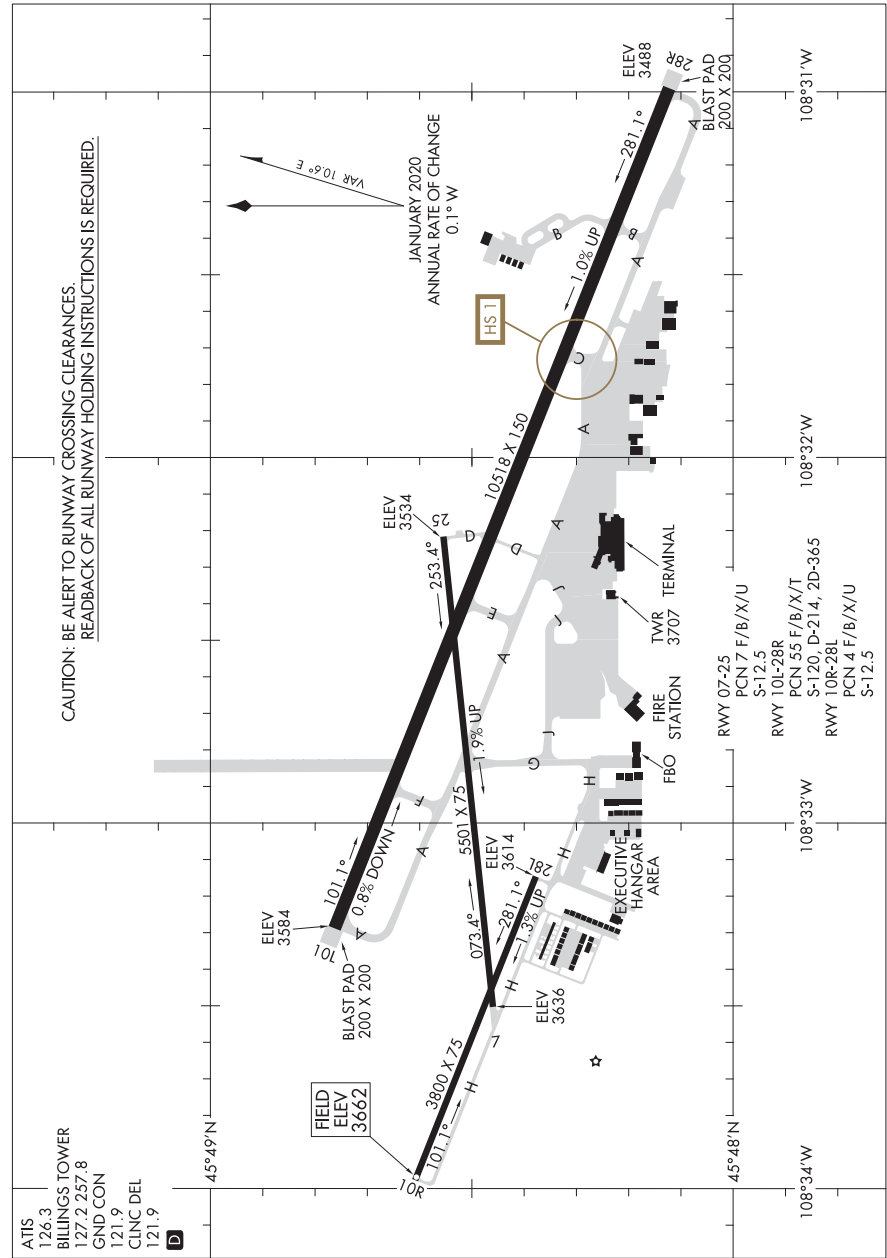
BELLINGHAM INTL (BLI)  
BELLINGHAM, WASHINGTON



AIRPORT DIAGRAM

BELLINGHAM, WASHINGTON  
BELLINGHAM INTL (BLI)

22363

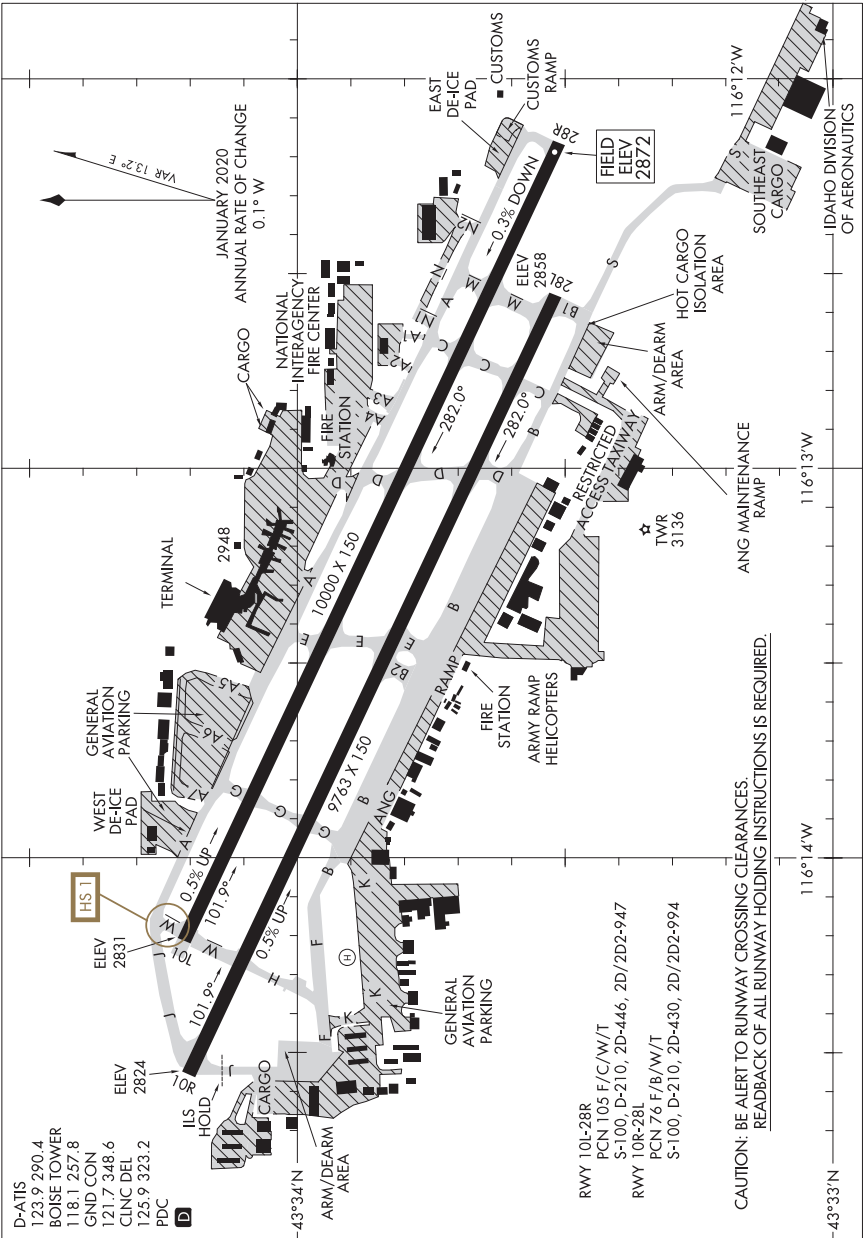




24025  
AIRPORT DIAGRAM

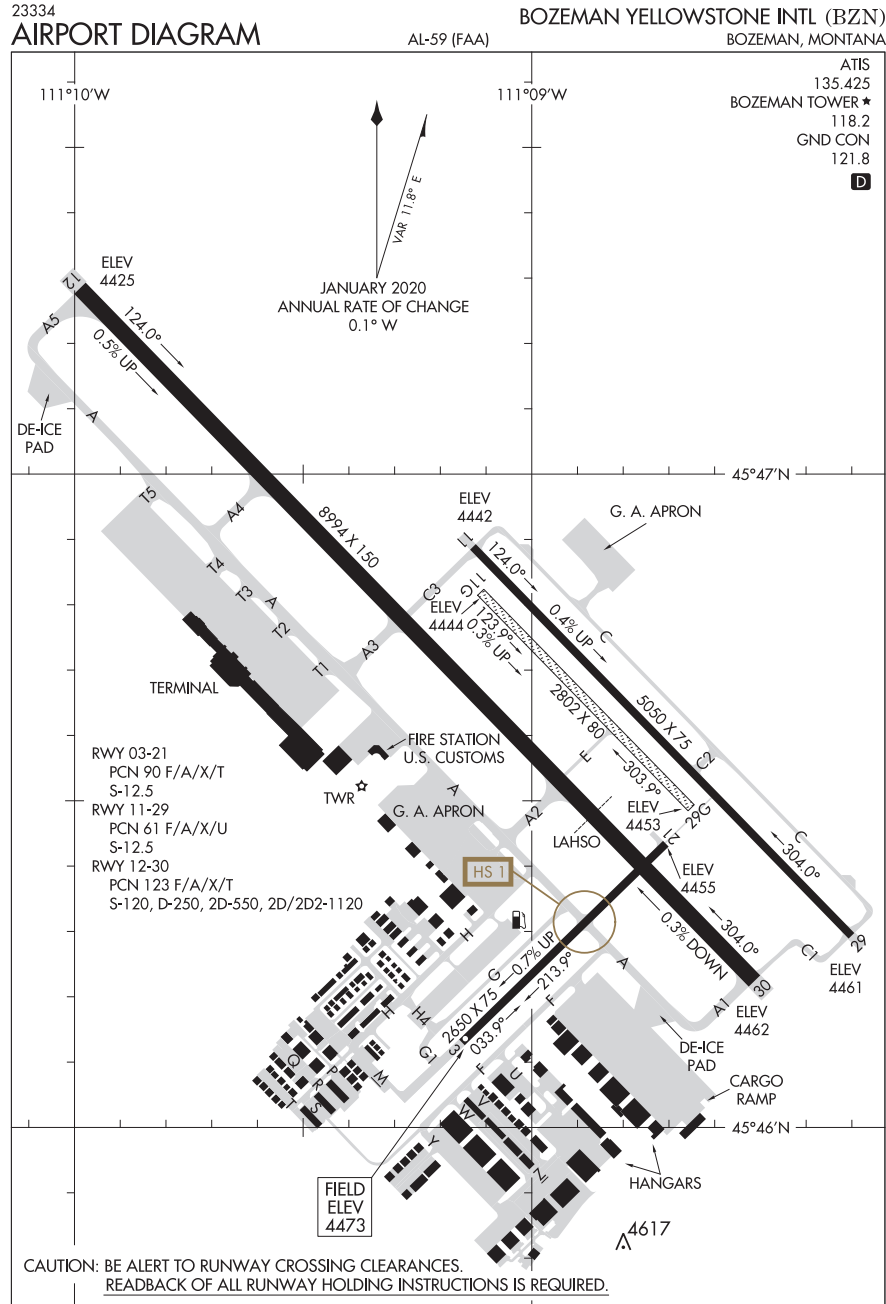
BOISE AIR TRML/GOWEN FLD (BOI)  
BOISE, IDAHO

AL-57 (FAA)



24025  
AIRPORT DIAGRAM

BOISE, IDAHO  
BOISE AIR TRML/GOWEN FLD (BOI)

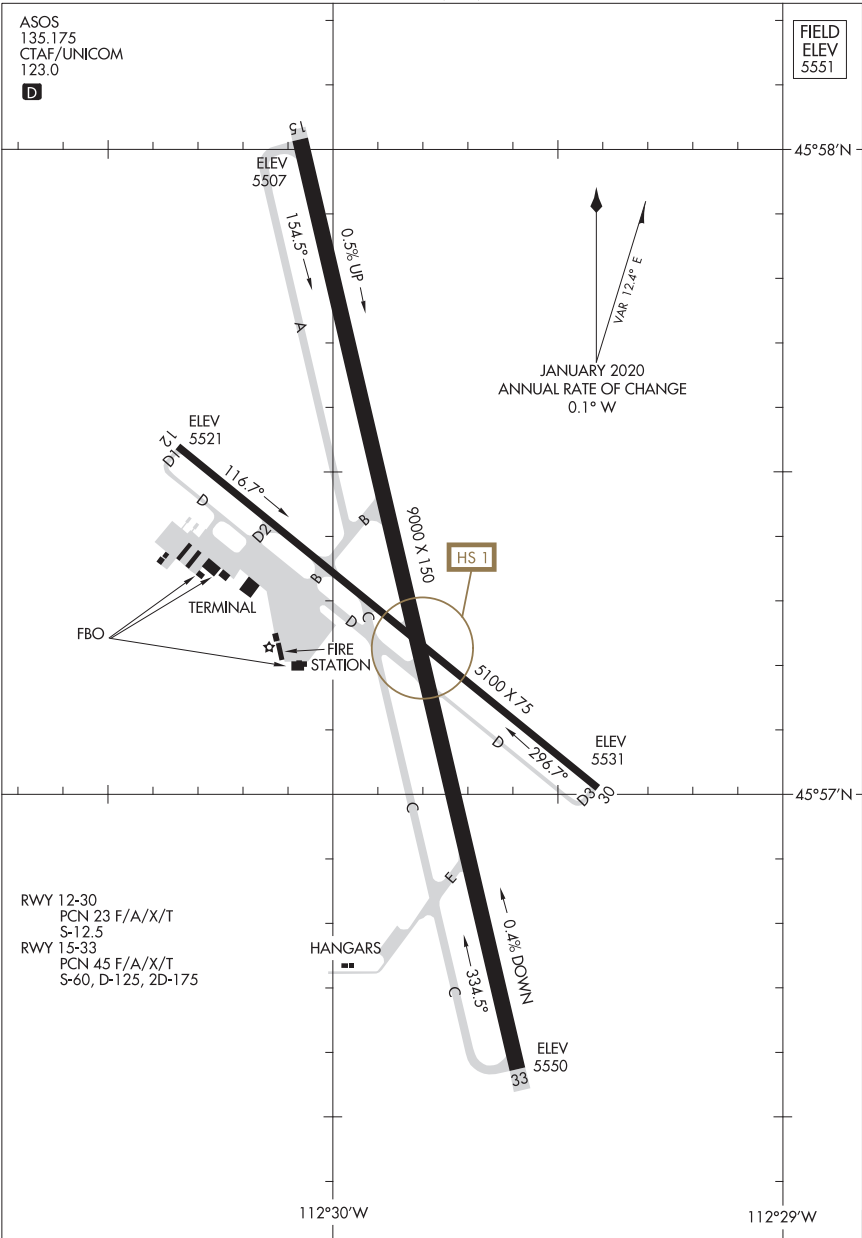


23054

AIRPORT DIAGRAM

AL-588 (FAA)

BERT MOONEY (BTM)  
BUTTE, MONTANA



AIRPORT DIAGRAM

23054

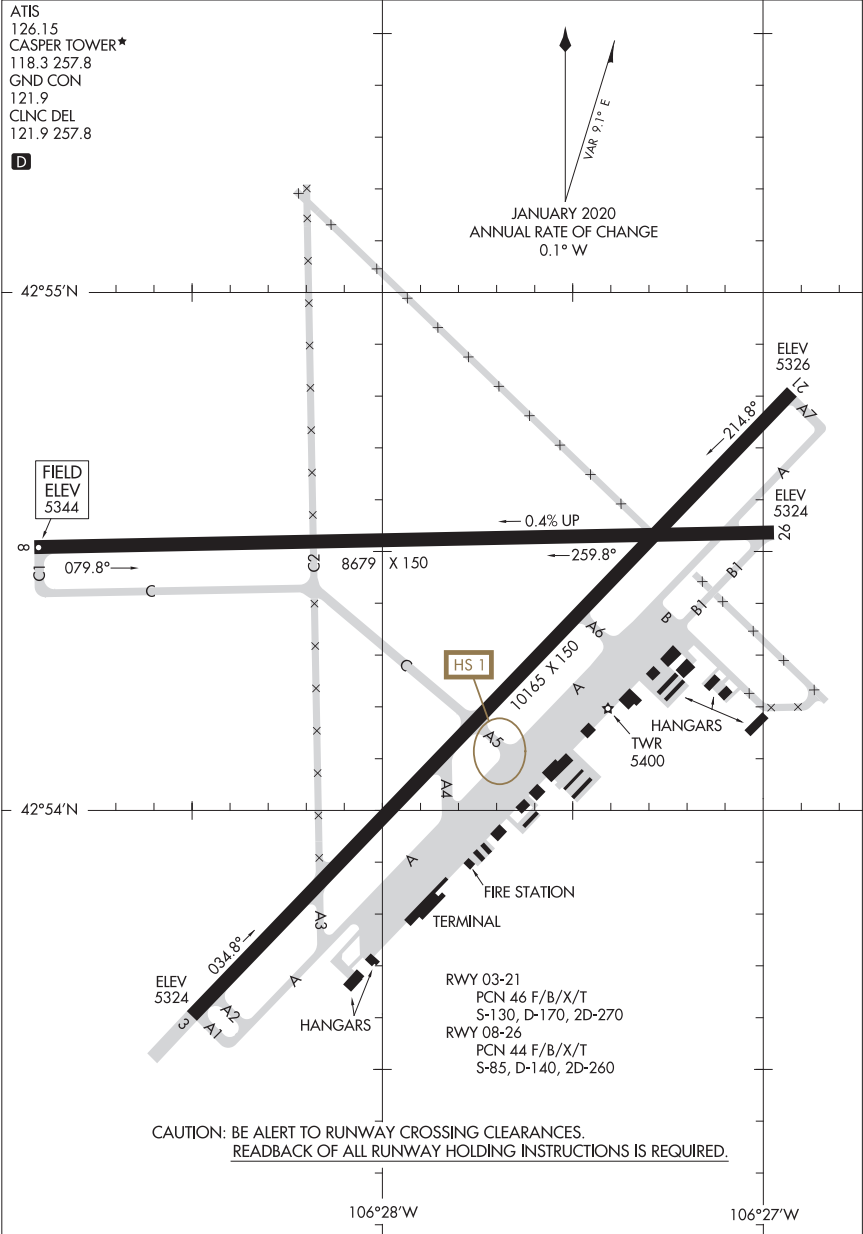
BUTTE, MONTANA  
BERT MOONEY (BTM)

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AIRPORT DIAGRAM

CASPER/NATRONA COUNTY INTL (CPR)  
CASPER, WYOMING

AL-72 (FAA)



AIRPORT DIAGRAM

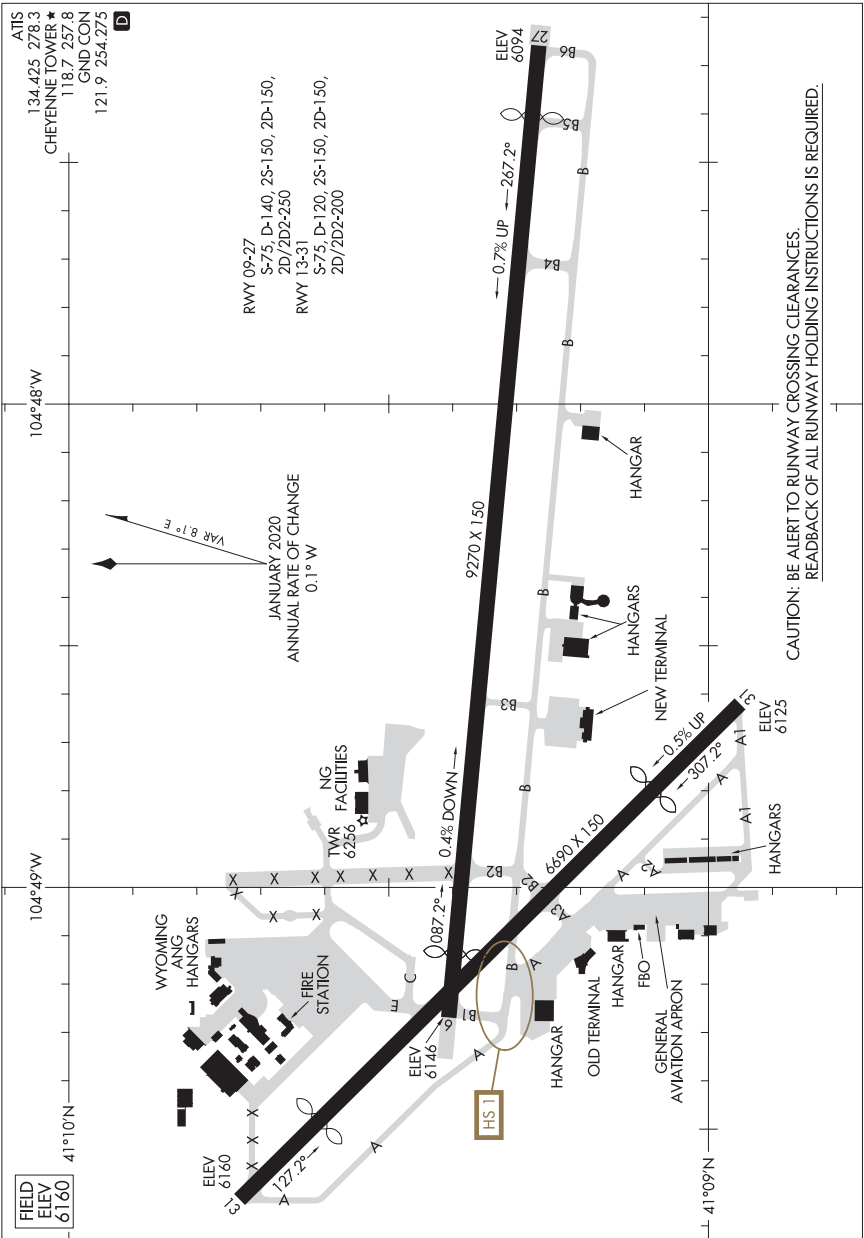
20086

CASPER, WYOMING  
CASPER/NATRONA COUNTY INTL (CPR)

21336

AIRPORT DIAGRAM

CHEYENNE RGNL/JERRY OLSON FLD (CYS)  
AL-80 (FAA) CHEYENNE, WYOMING



AIRPORT DIAGRAM

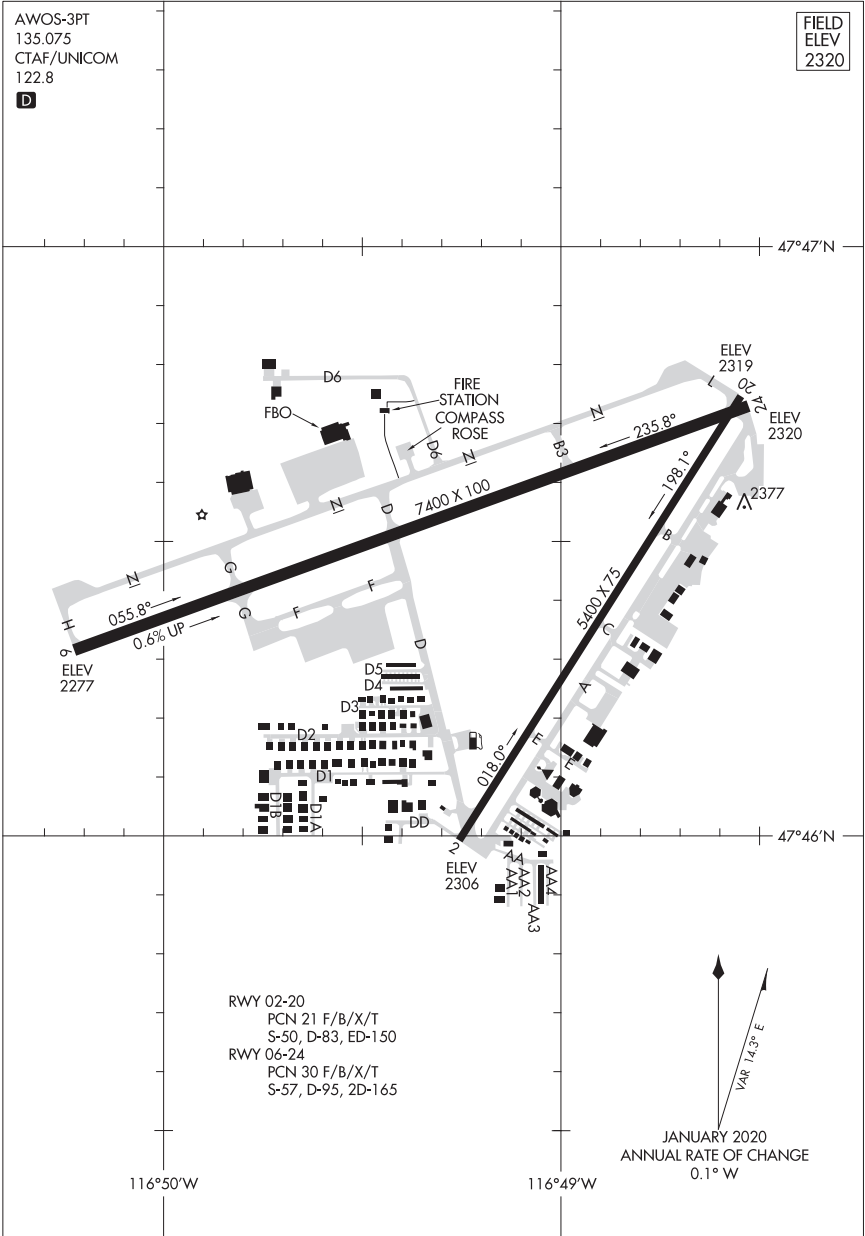
CHEYENNE, WYOMING  
CHEYENNE RGNL/JERRY OLSON FLD (CYS)

21336

23334

AIRPORT DIAGRAM

COEUR D'ALENE/PAPPY BOYINGTON FLD (COE)  
AL-527 (FAA) COEUR D'ALENE, IDAHO



AIRPORT DIAGRAM

23334

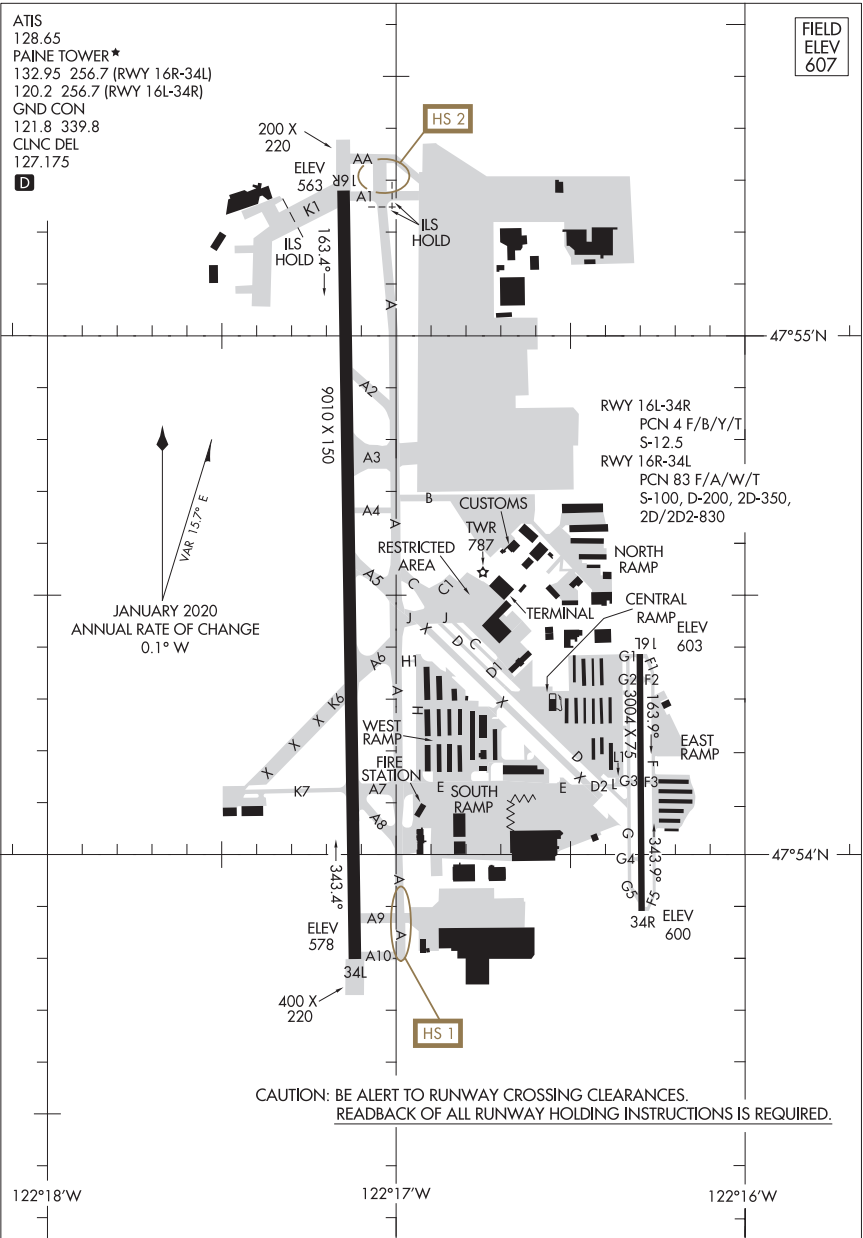
COEUR D'ALENE, IDAHO  
COEUR D'ALENE/PAPPY BOYINGTON FLD (COE)



23278

AIRPORT DIAGRAM

SEATTLE PAINE FLD INTL (PAE)  
EVERETT, WASHINGTON



AIRPORT DIAGRAM

23278

EVERETT, WASHINGTON  
SEATTLE PAINE FLD INTL (PAE)



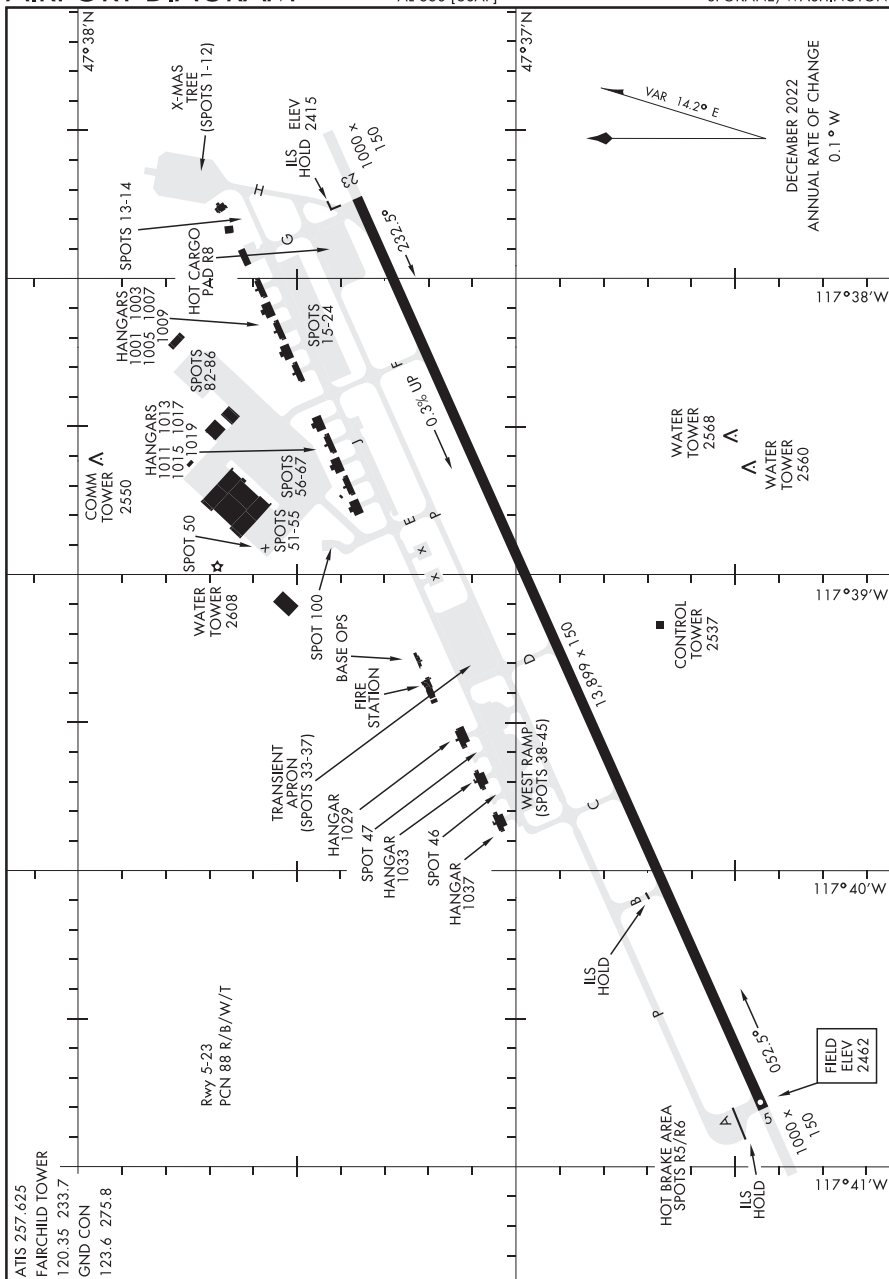
22363

## AIRPORT DIAGRAM

AL-553 [USAF]

FAIRCHILD AFB (KSKA)

SPOKANE, WASHINGTON



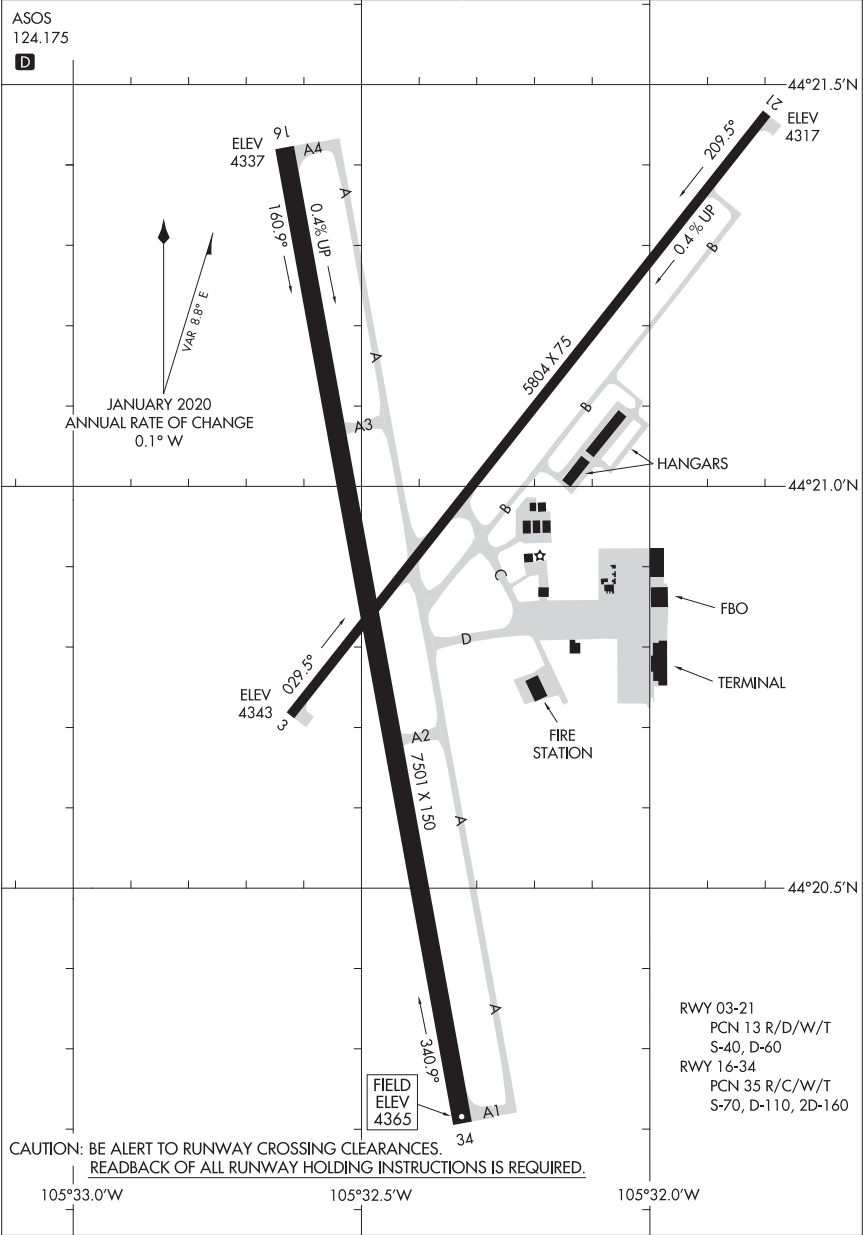
# AIRPORT DIAGRAM

SPOKANE, WASHINGTON

FAIRCHILD AFB (KSKA)

21168  
AIRPORT DIAGRAM

AL-5728 (FAA)      NORTHEAST WYOMING RGNL (GCC)  
GILLETTE, WYOMING

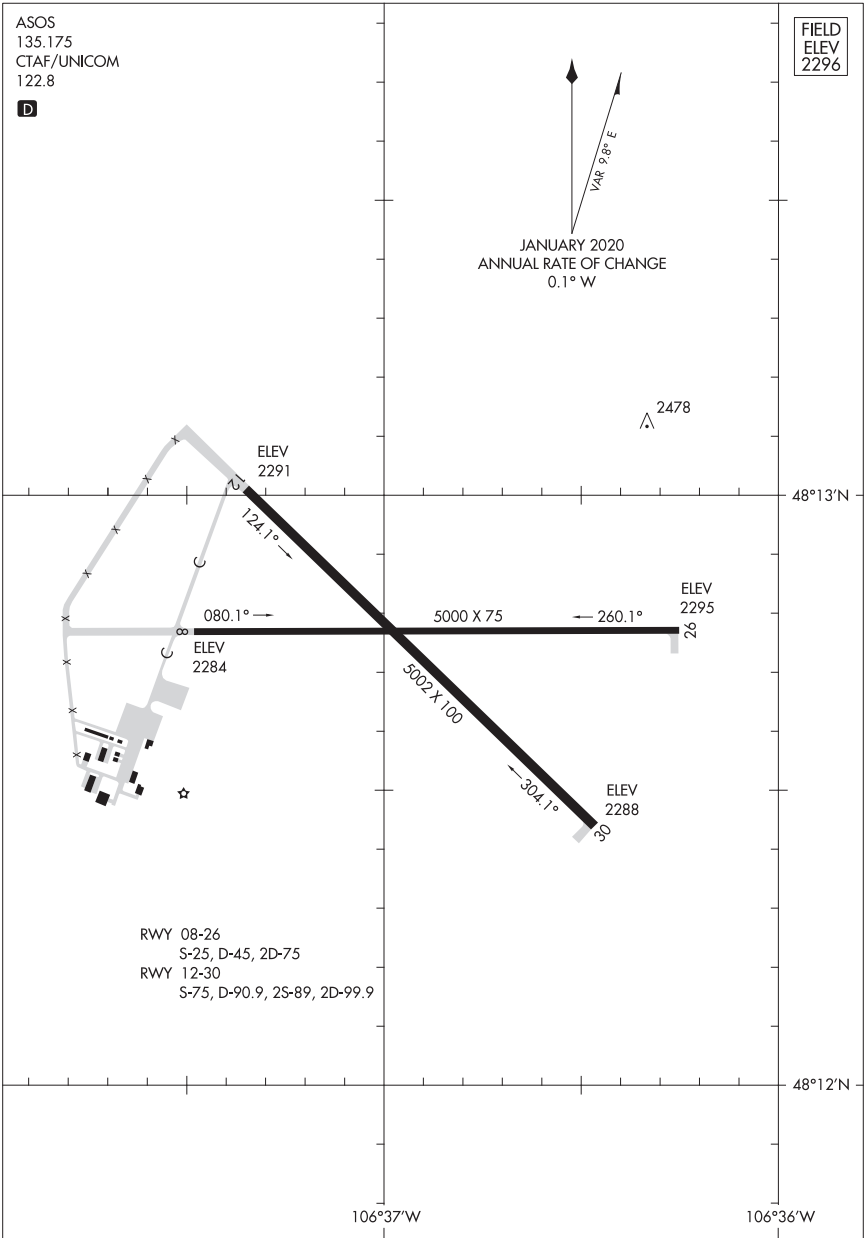


AIRPORT DIAGRAM  
21168

GILLETTE, WYOMING  
NORTHEAST WYOMING RGNL (GCC)

21112  
AIRPORT DIAGRAM

WOKAL FLD/GLASGOW-VALLEY COUNTY (GGW)  
AL-5382 (FAA) GLASGOW, MONTANA



AIRPORT DIAGRAM  
21112

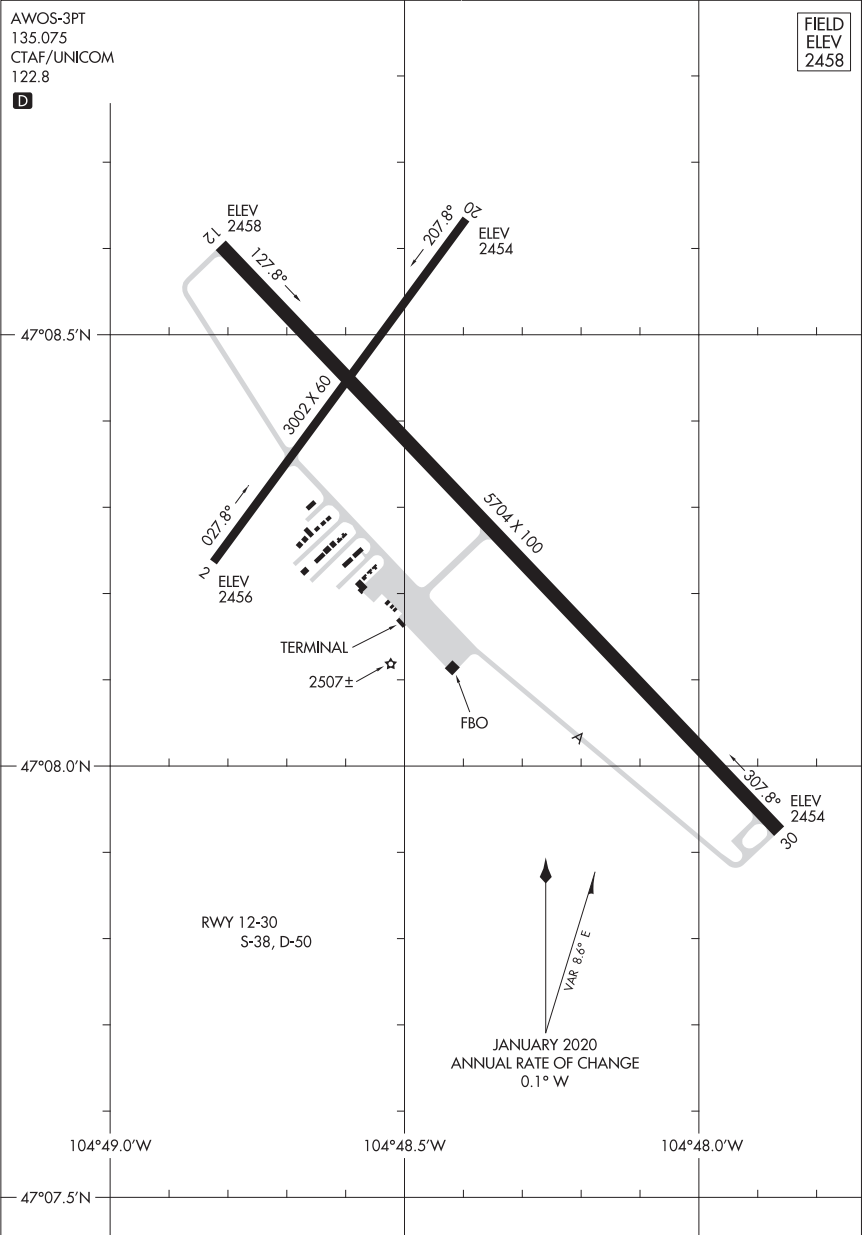
GLASGOW, MONTANA  
WOKAL FLD/GLASGOW-VALLEY COUNTY (GGW)

22083

AIRPORT DIAGRAM

AL-6078 (FAA)

DAWSON COMMUNITY (GDV)  
GLENDDIVE, MONTANA



AIRPORT DIAGRAM

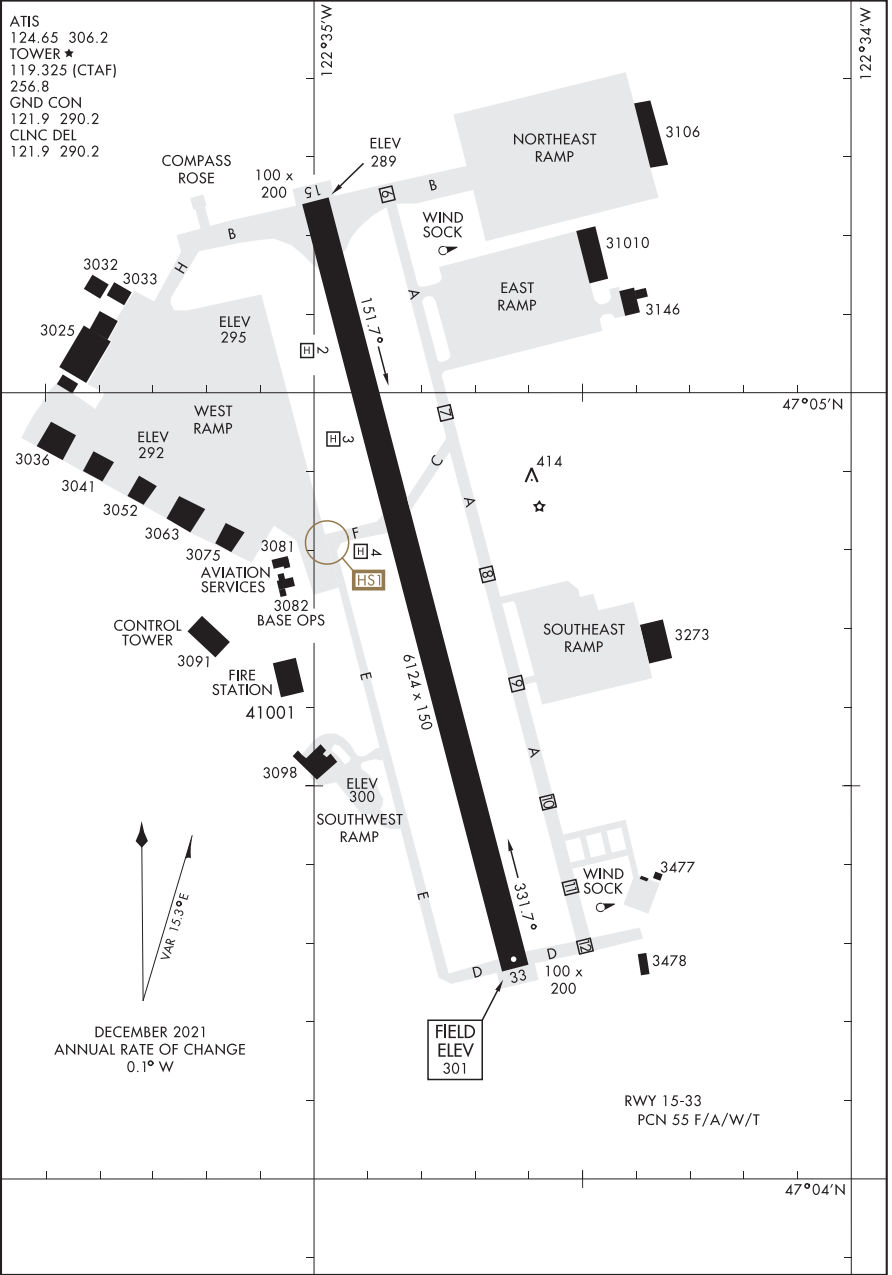
22083

GLENDDIVE, MONTANA  
DAWSON COMMUNITY (GDV)

21336

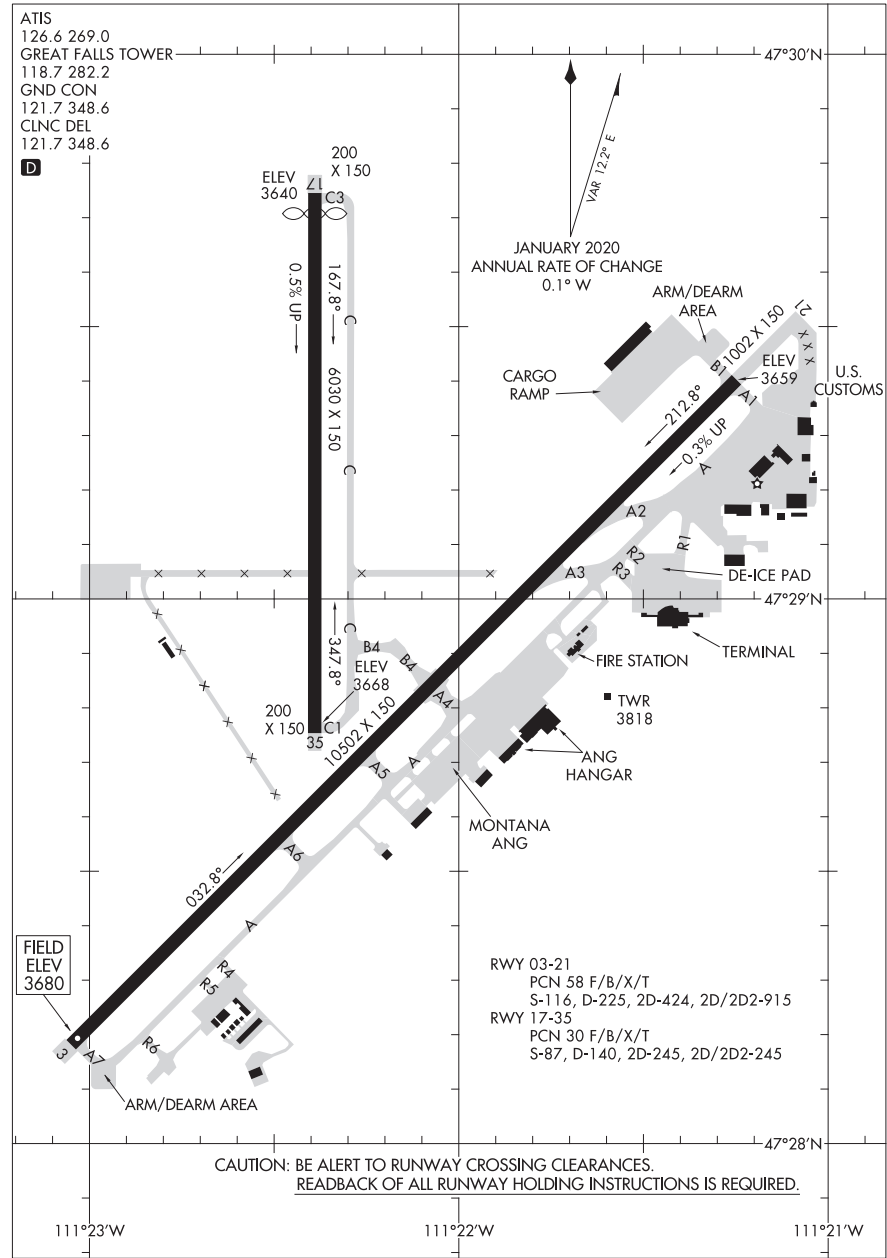
AIRPORT DIAGRAM

GRAY AAF (JOINT BASE LEWIS MCCORD) (KGRF)  
AL-413 [USA] FORT LEWIS, WASHINGTON



AIRPORT DIAGRAM

FORT LEWIS, WASHINGTON  
GRAY AAF (JOINT BASE LEWIS MCCORD) (KGRF)

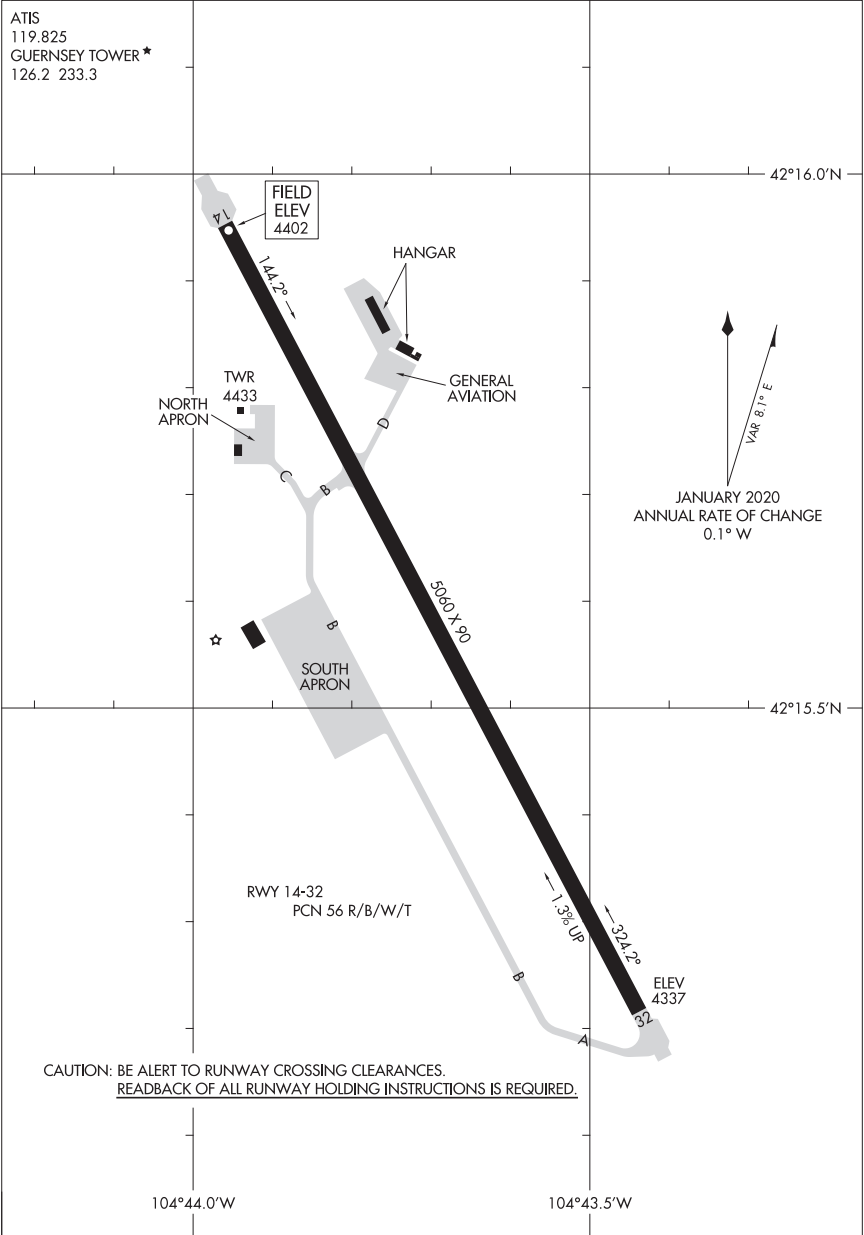


20086

AIRPORT DIAGRAM

AL-9220 (FAA)

CAMP GUERNSEY (GUR)  
GUERNSEY, WYOMING



AIRPORT DIAGRAM

20086

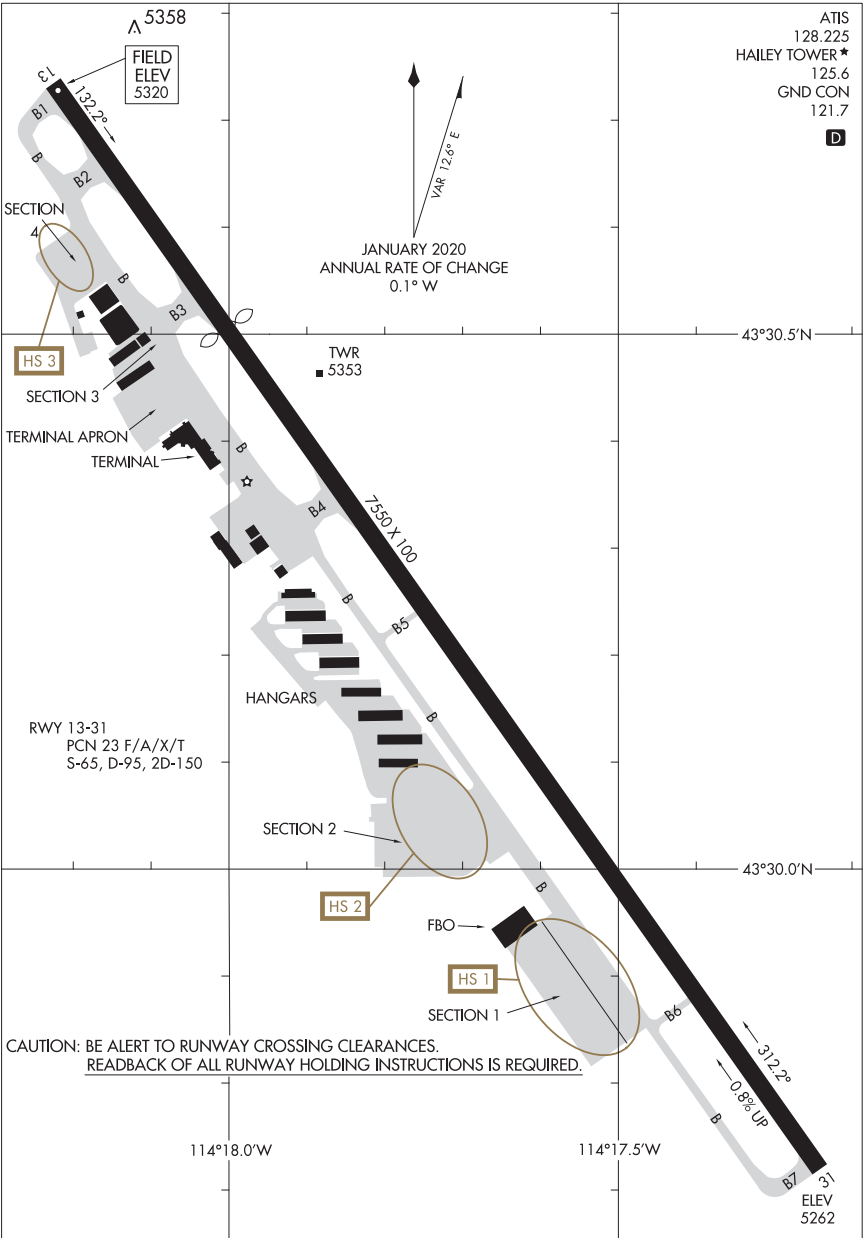
GUERNSEY, WYOMING  
CAMP GUERNSEY (GUR)

21112

AIRPORT DIAGRAM

AL-6239 (FAA)

FRIEDMAN MEML (SUN)  
HAILEY, IDAHO



AIRPORT DIAGRAM

21112

HAILEY, IDAHO  
FRIEDMAN MEML (SUN)

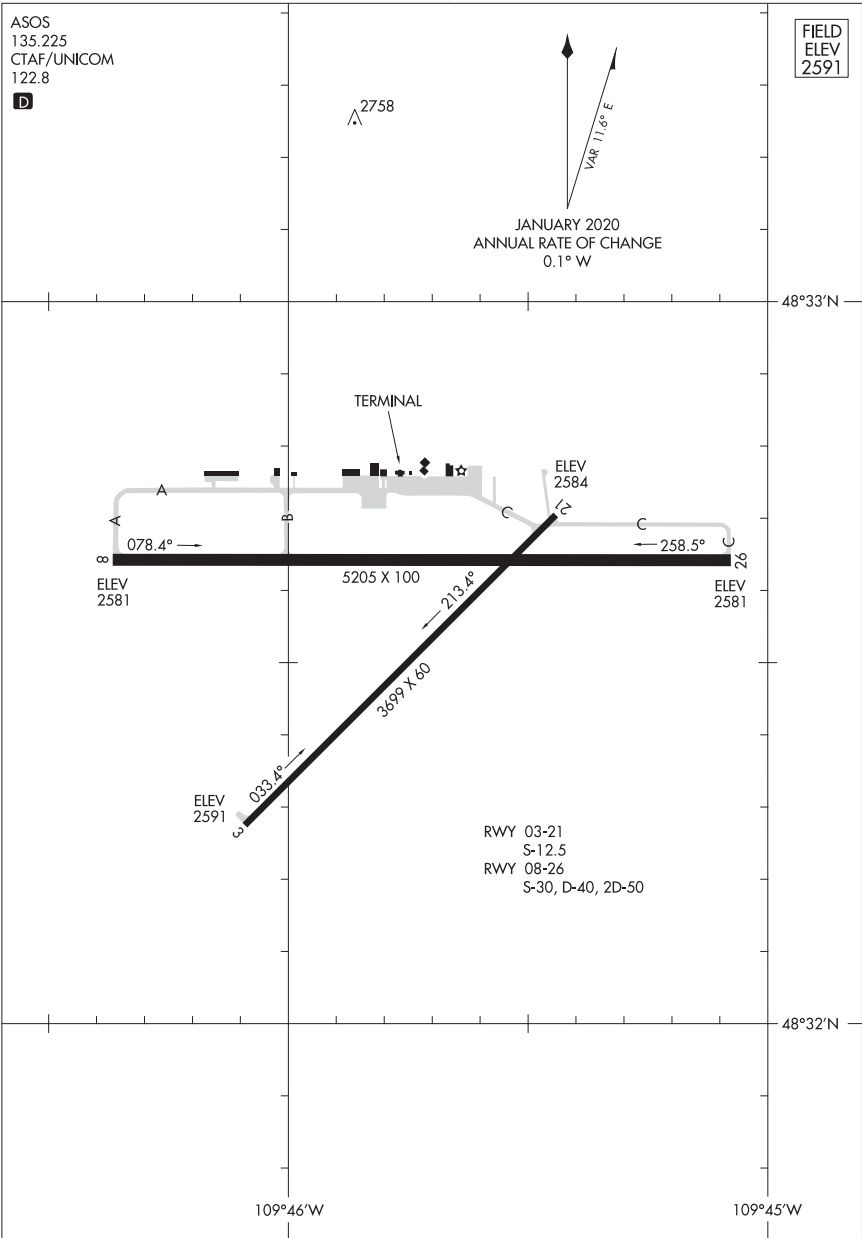


22083

AIRPORT DIAGRAM

AL-5575 (FAA)

HAVRE CITY-COUNTY (HVR)  
HAVRE, MONTANA



AIRPORT DIAGRAM

22083

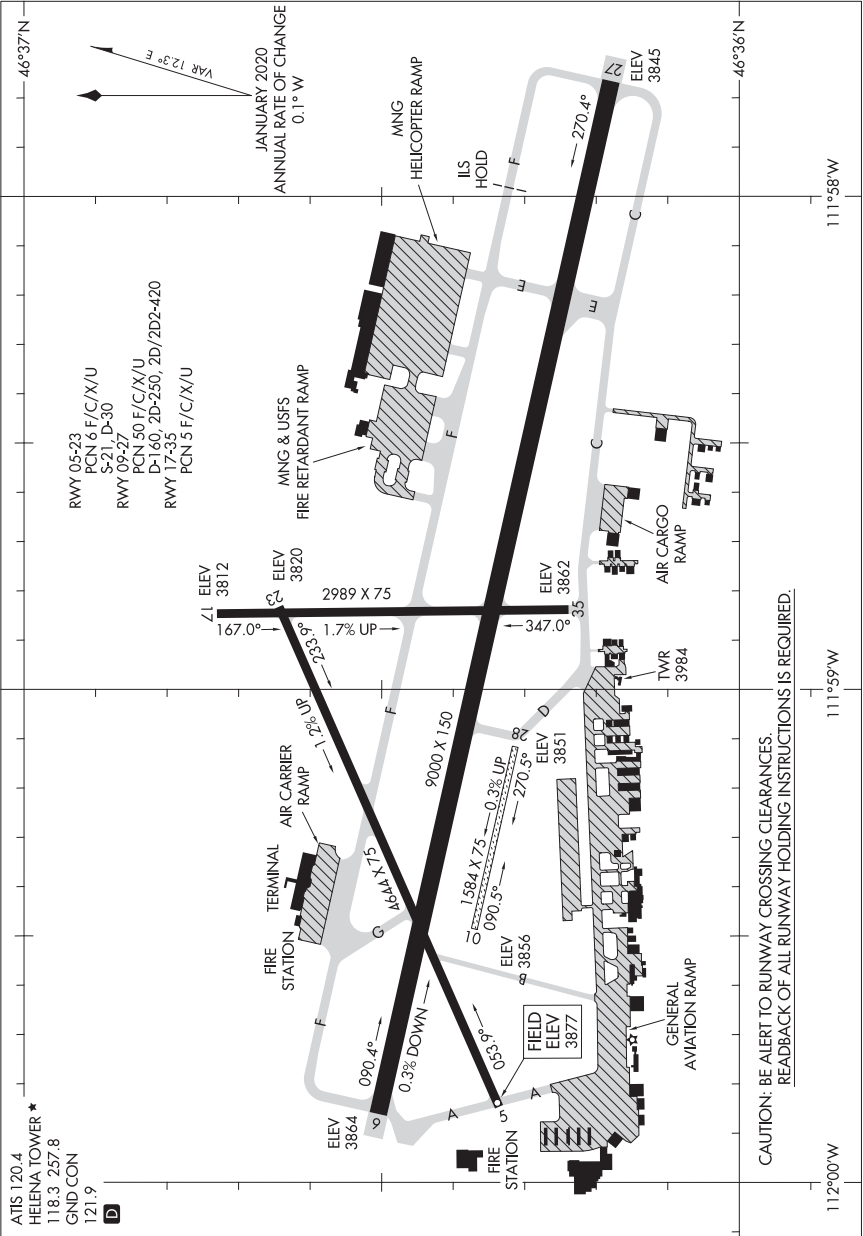
HAVRE, MONTANA  
HAVRE CITY-COUNTY (HVR)

24025

AIRPORT DIAGRAM

AL-192 (FAA)

HELENA RGNL (HLN)  
HELENA, MONTANA



AIRPORT DIAGRAM

24025

HELENA, MONTANA  
HELENA RGNL (HLN)

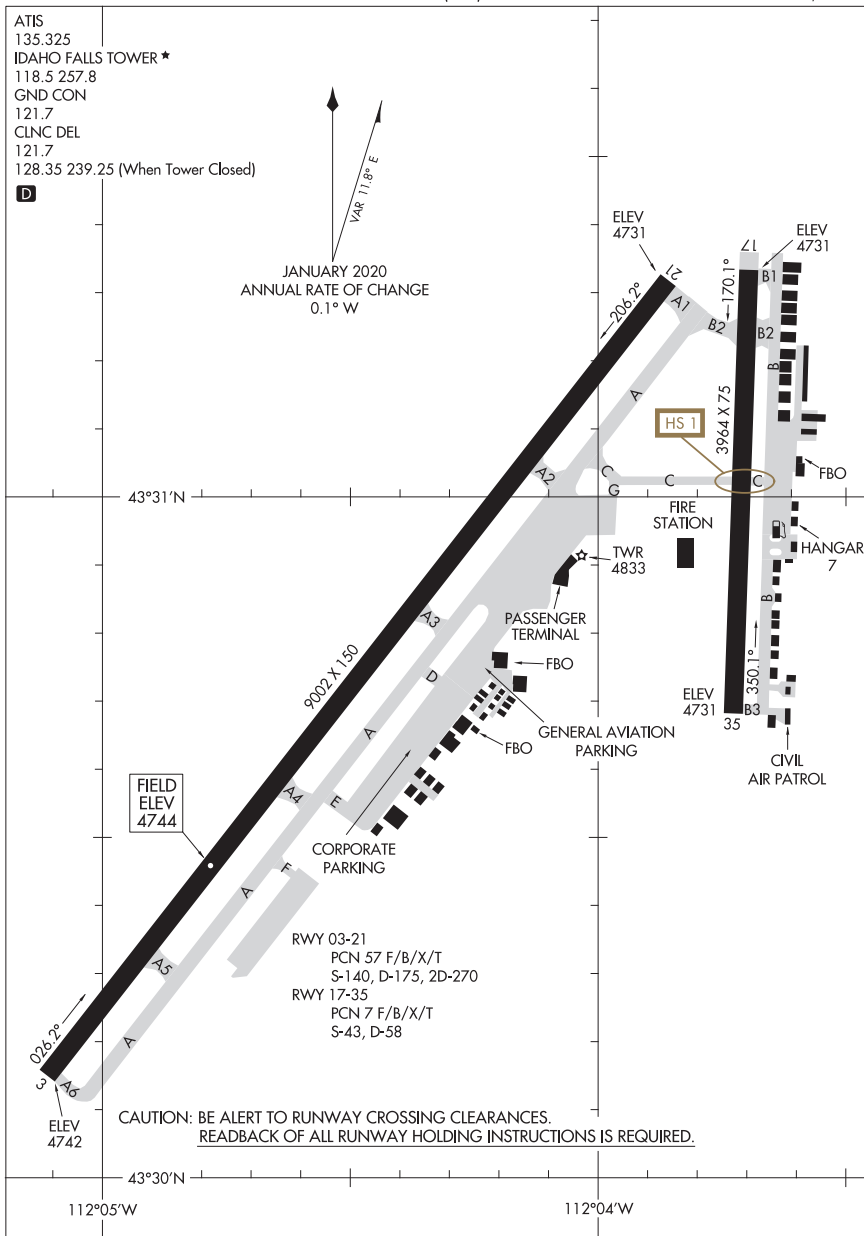
23334

## AIRPORT DIAGRAM

AL-590 (FAA)

IDAHO FALLS RGNL (TDA)

IDAHO FALLS, IDAHO

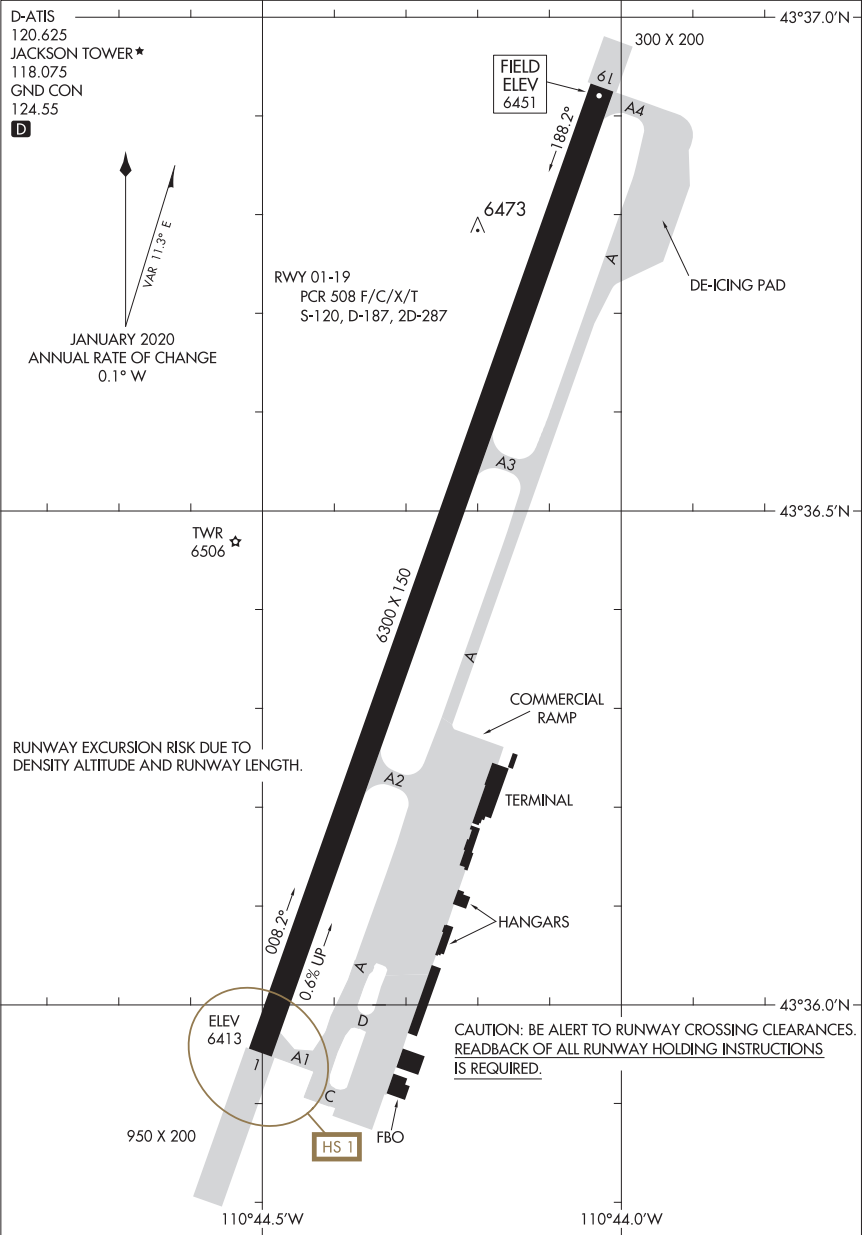


23222

AIRPORT DIAGRAM

AL-504 (FAA)

JACKSON HOLE (JAC)  
JACKSON, WYOMING



AIRPORT DIAGRAM

23222

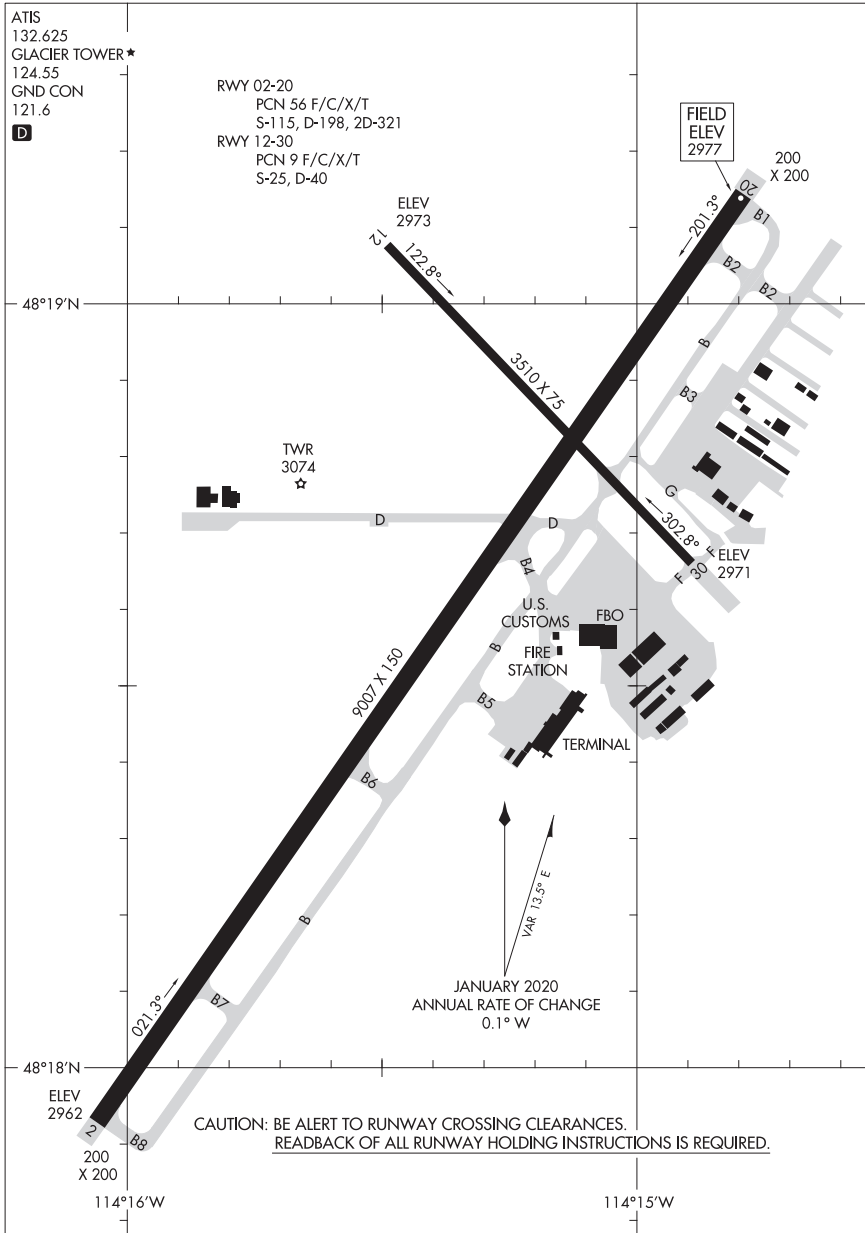
JACKSON, WYOMING  
JACKSON HOLE (JAC)

20086

## AIRPORT DIAGRAM

AL-887 (FAA)

GLACIER PARK INTL (GPI)  
KALISPELL, MONTANA



## AIRPORT DIAGRAM

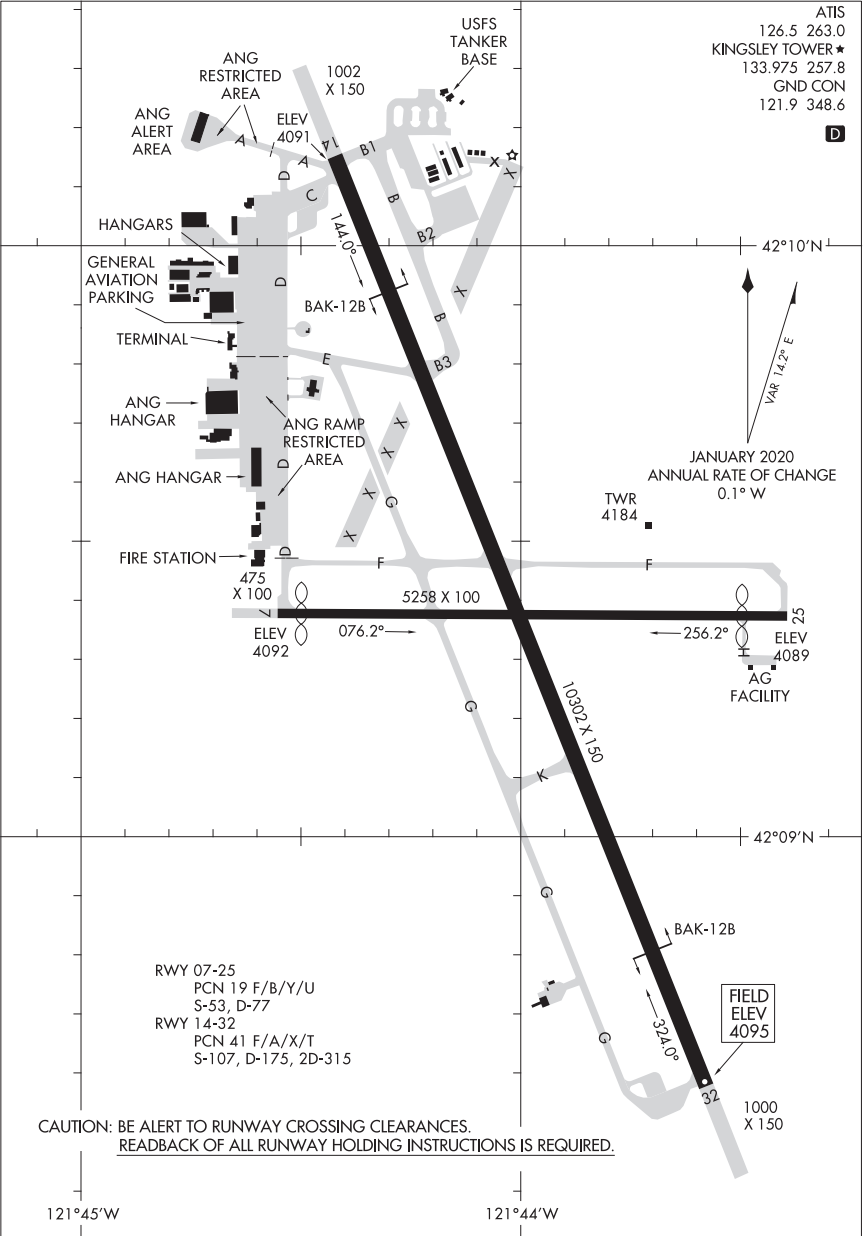
20086

KALISPELL, MONTANA  
GLACIER PARK INTL (GPI)

22027

AIRPORT DIAGRAM

AL-473 (FAA) CRATER LAKE/KLAMATH RGNL (LMT)  
KLAMATH FALLS, OREGON



AIRPORT DIAGRAM

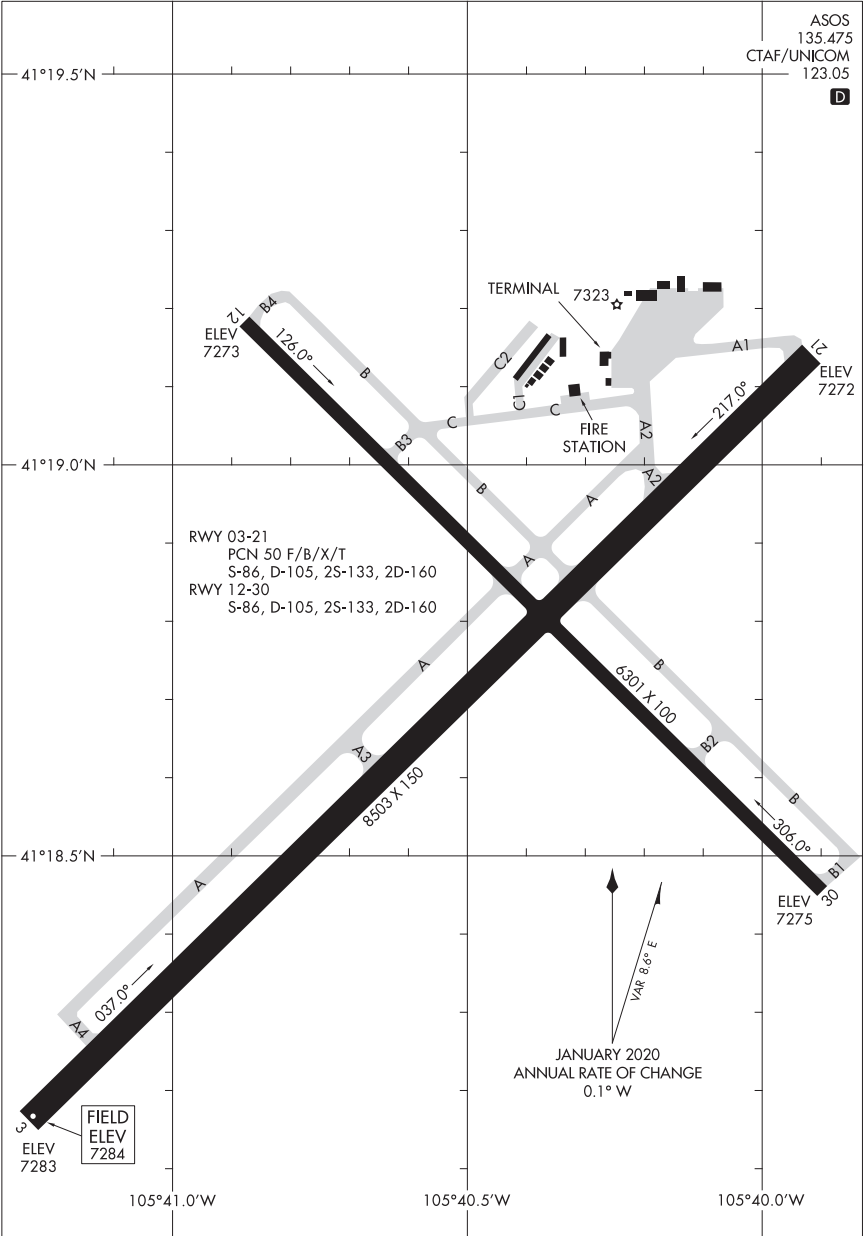
22027

KLAMATH FALLS, OREGON  
CRATER LAKE/KLAMATH RGNL (LMT)

23110  
AIRPORT DIAGRAM

AL-225 (FAA)

LARAMIE RGNL (LAR)  
LARAMIE, WYOMING



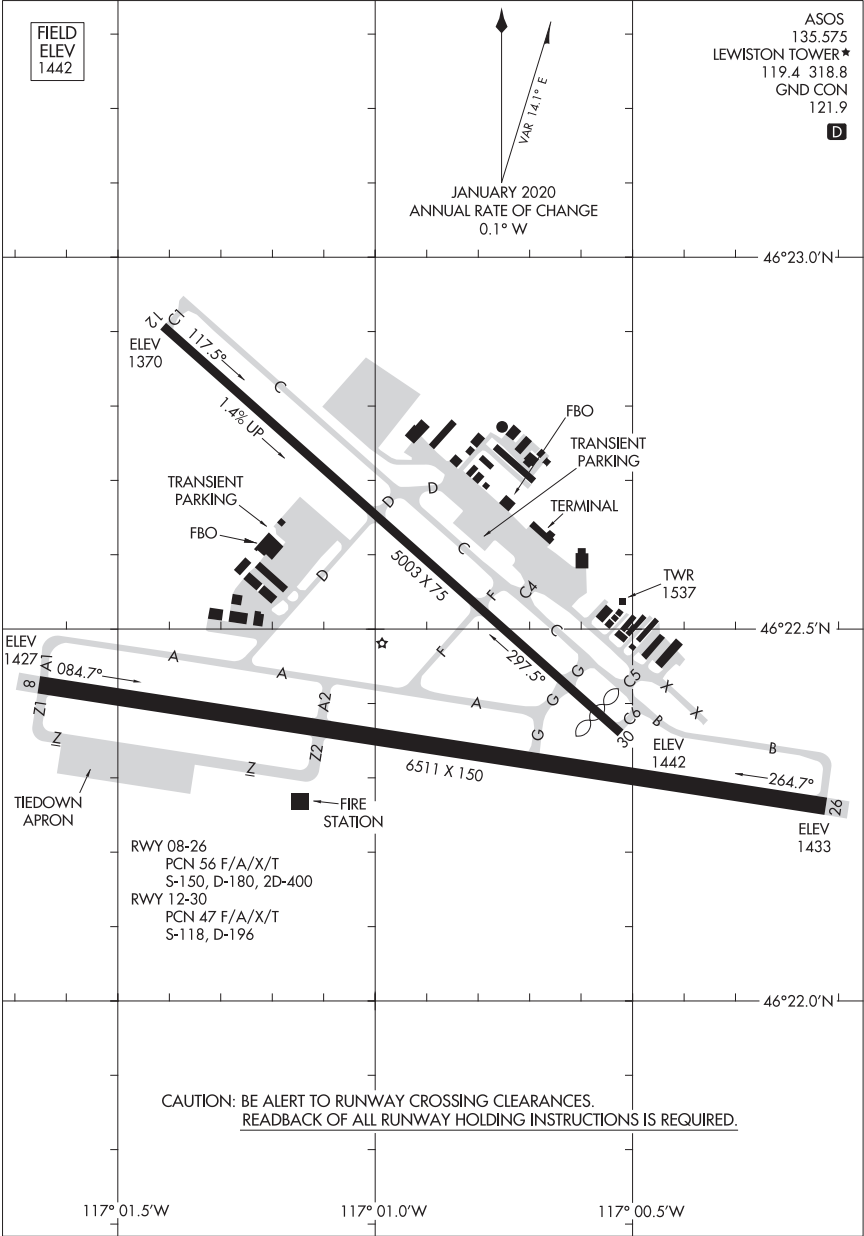
AIRPORT DIAGRAM  
23110

LARAMIE, WYOMING  
LARAMIE RGNL (LAR)

22027

AIRPORT DIAGRAM

AL-515 (FAA) LEWISTON/NEZ PERCE COUNTY (LWS) LEWISTON, IDAHO



AIRPORT DIAGRAM

22027

LEWISTON, IDAHO LEWISTON/NEZ PERCE COUNTY (LWS)

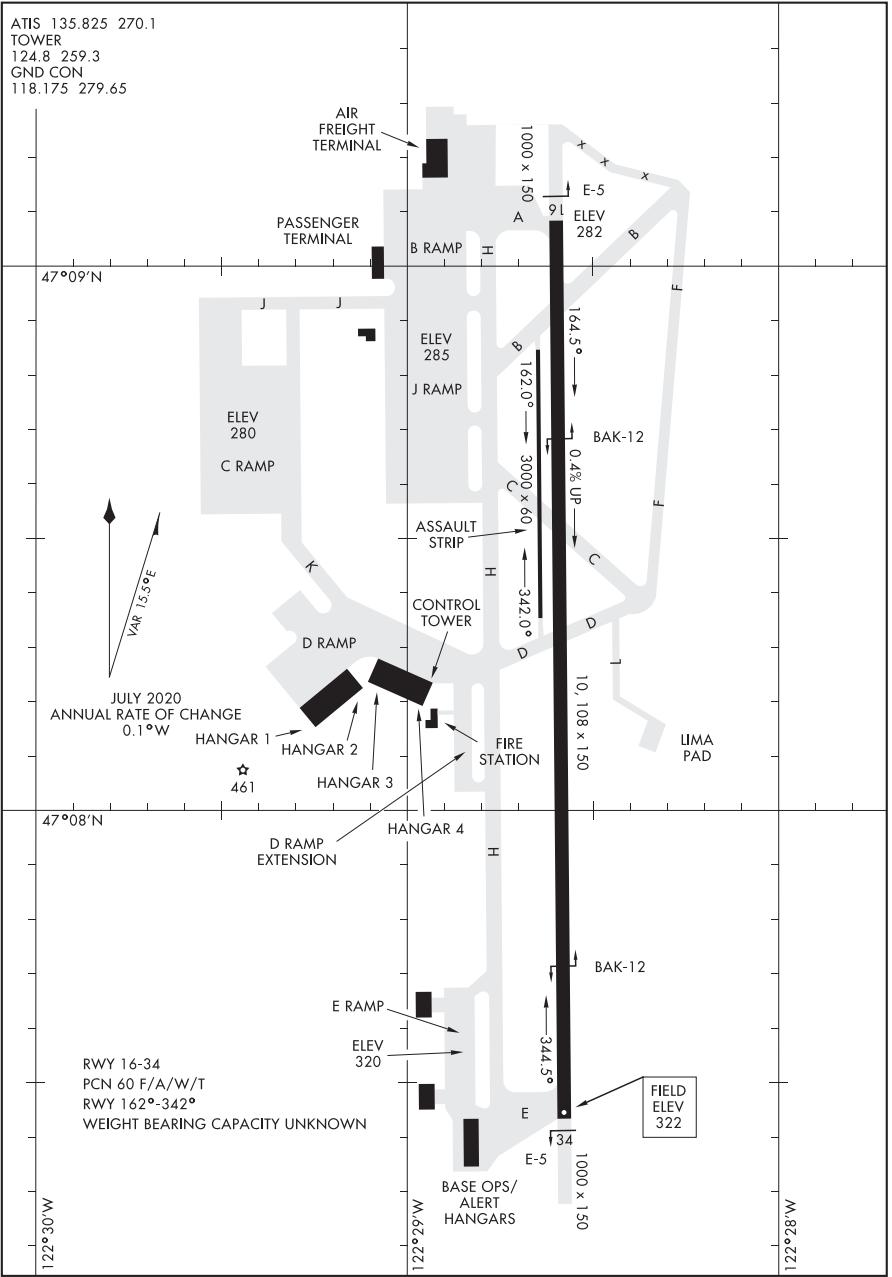


23334

AIRPORT DIAGRAM

[USAF]

MCCHORD FLD (KTCM)  
TACOMA, WASHINGTON



AIRPORT DIAGRAM

TACOMA, WASHINGTON  
MCCHORD FLD (KTCM)

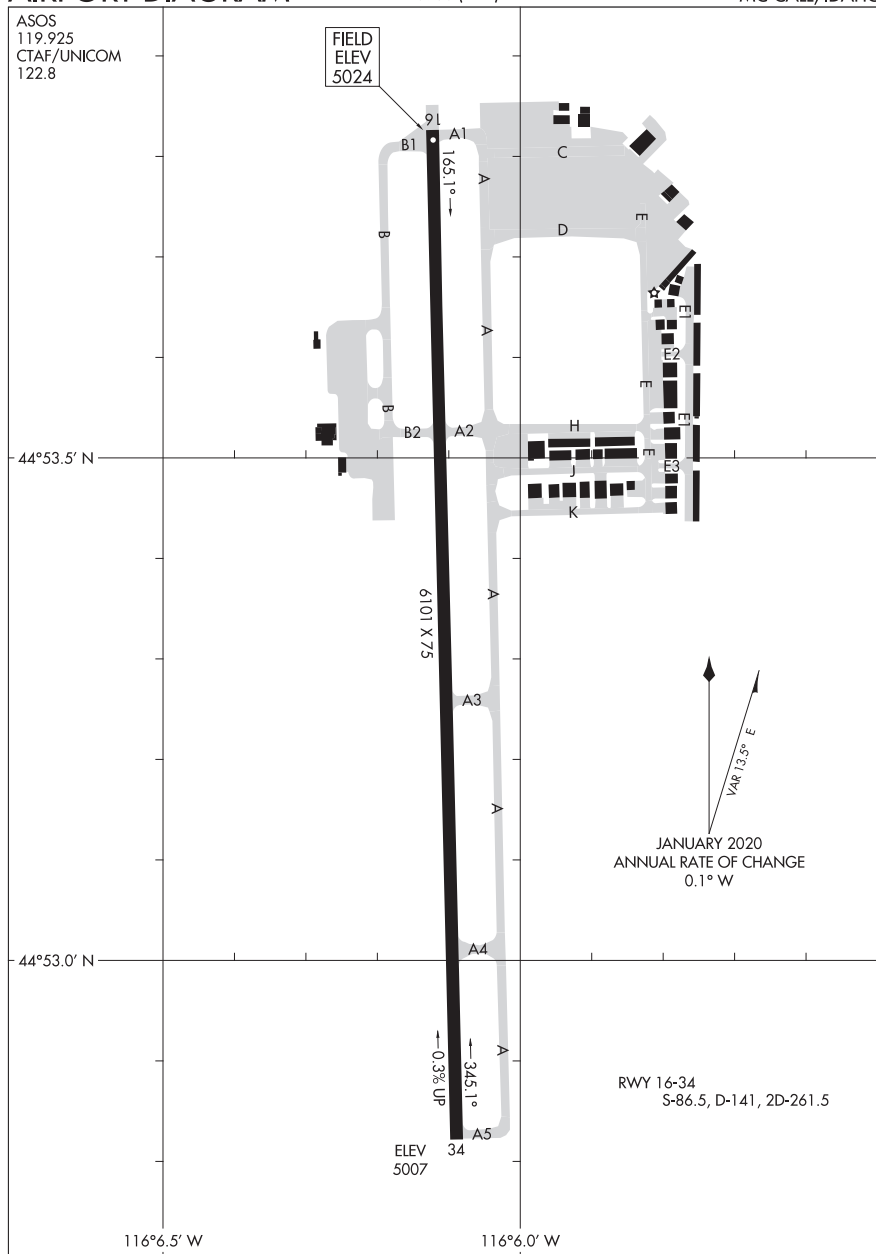
23054

# AIRPORT DIAGRAM

AL-6936 (FAA)

MC CALL MUNI (MYL)

MC CALL, IDAHO



## AIRPORT DIAGRAM

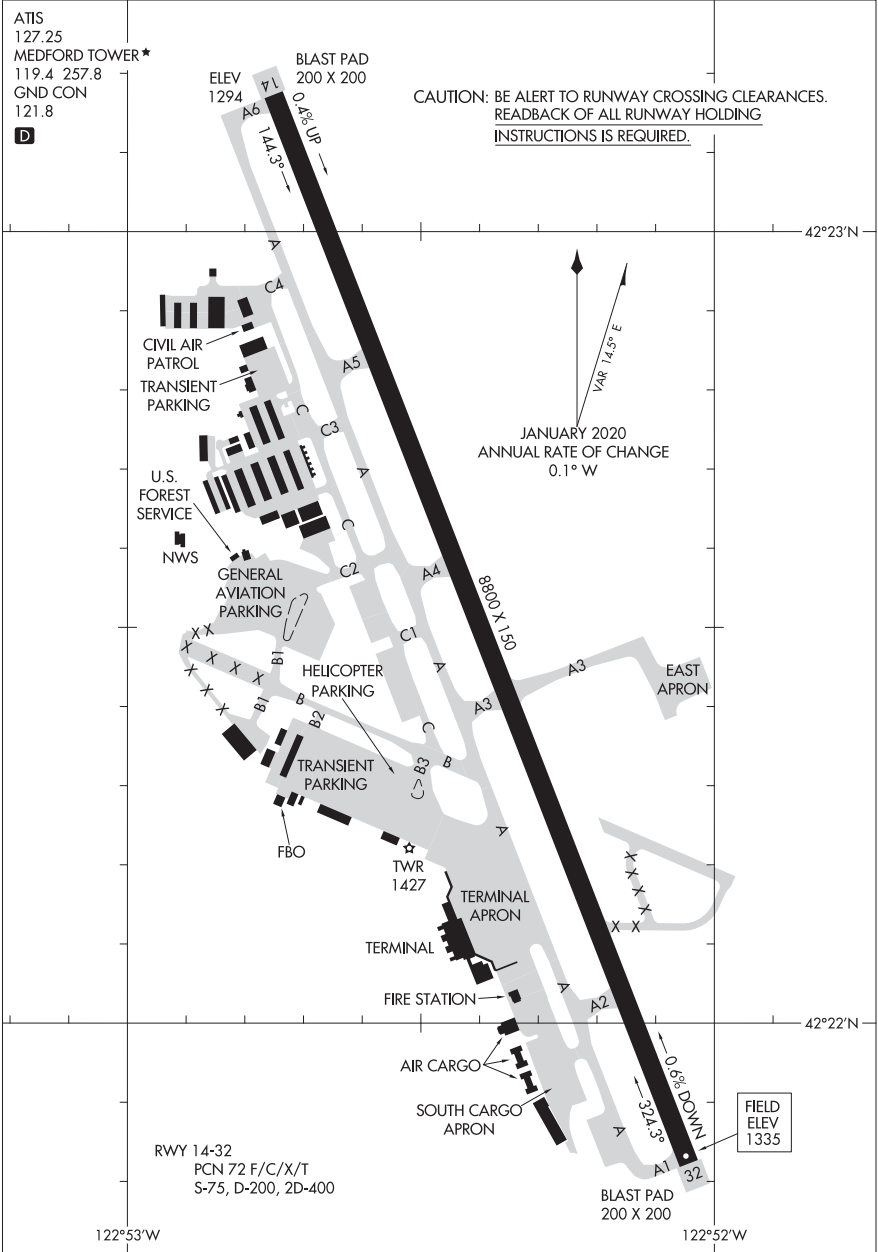
23054

MC CALL, IDAHO

MC CALL MUNI (MYL)

23334  
AIRPORT DIAGRAM

ROGUE VALLEY INTL - MEDFORD (MFR)  
AL-251 (FAA) MEDFORD, OREGON



AIRPORT DIAGRAM

MEDFORD, OREGON  
ROGUE VALLEY INTL - MEDFORD (MFR)

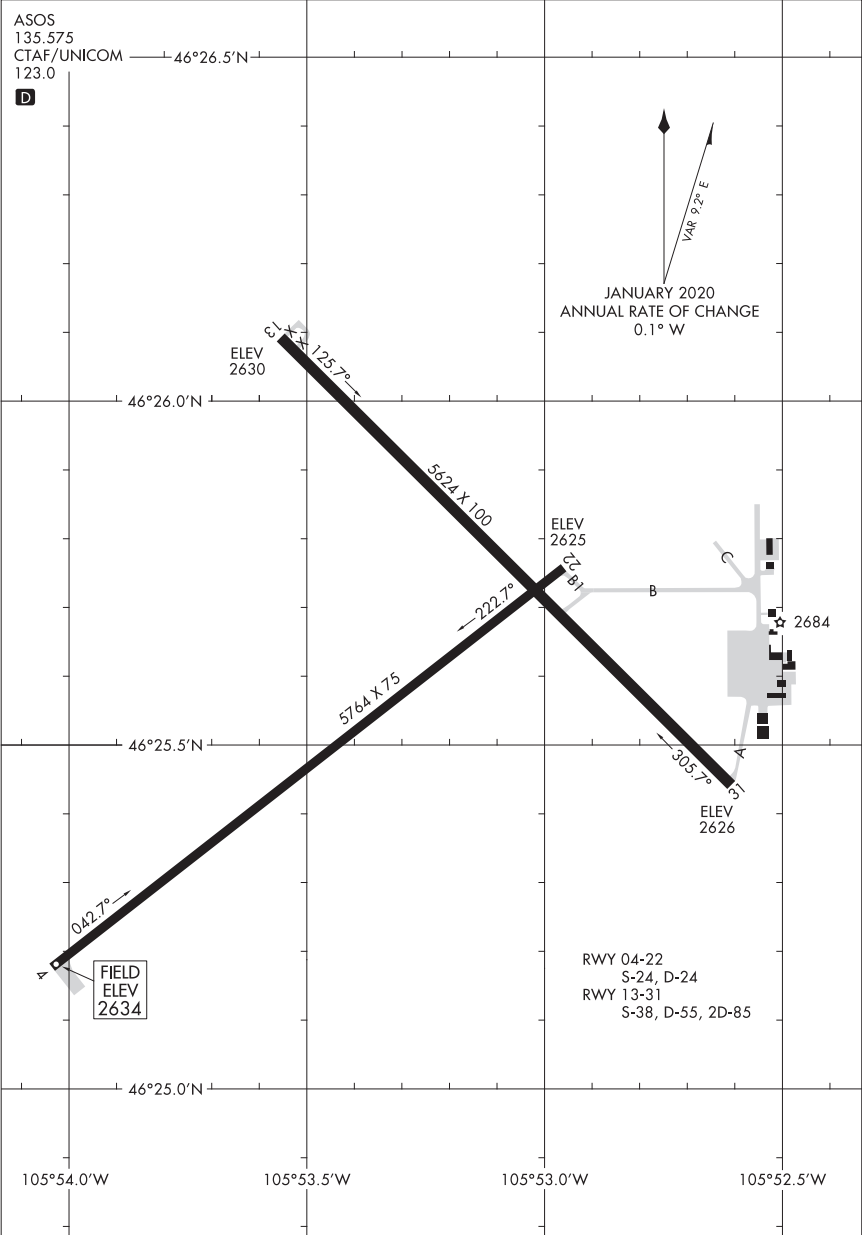
23334

22195

AIRPORT DIAGRAM

AL-259 (FAA)

FRANK WILEY FLD (MLS)  
MILES CITY, MONTANA



AIRPORT DIAGRAM

22195

MILES CITY, MONTANA  
FRANK WILEY FLD (MLS)

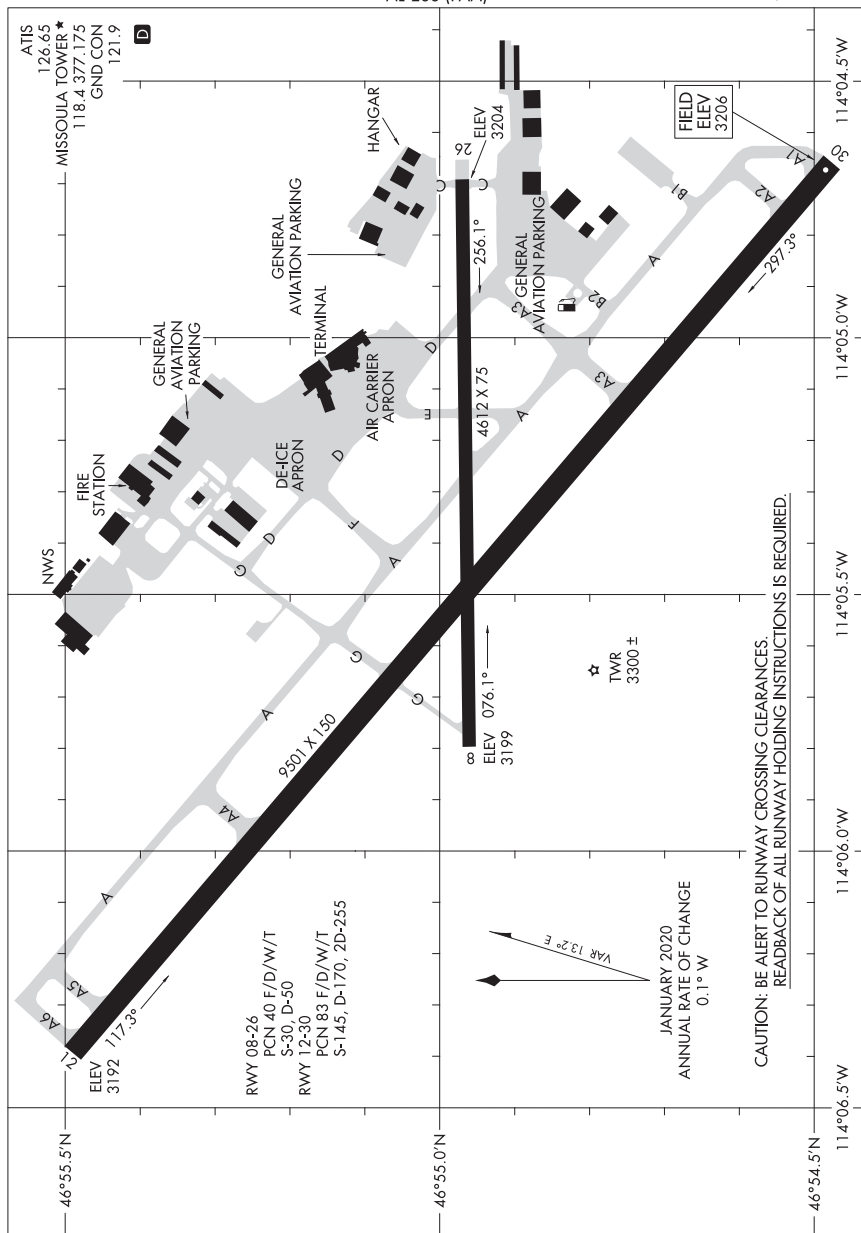
21336

## AIRPORT DIAGRAM

AL-266 (FAA)

MISSOULA MONTANA (MSO)

MISSOULA, MONTANA



CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.  
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

## AIRPORT DIAGRAM

21336

MISSOULA, MONTANA  
MISSOULA MONTANA (MISO)

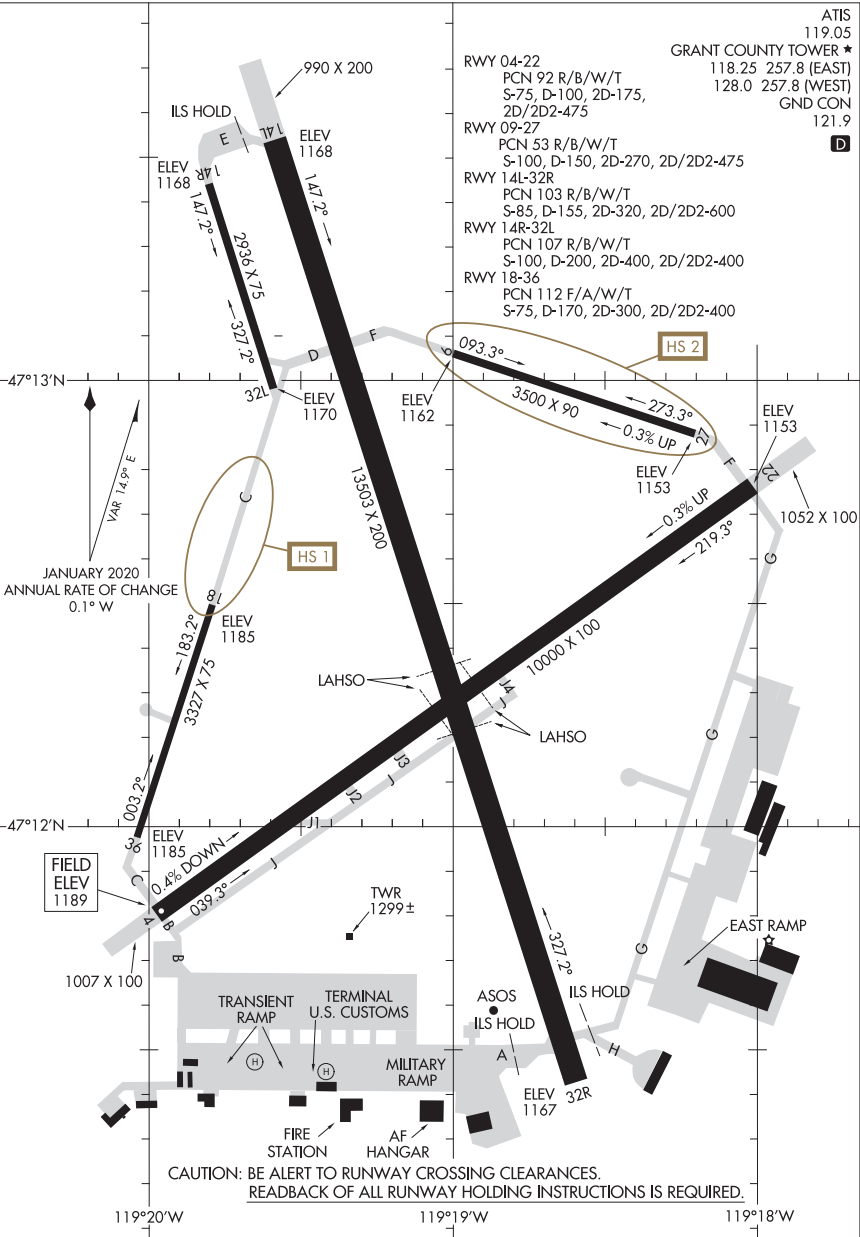
MISSOULA MONTANA (MSO)

20254

AIRPORT DIAGRAM

AL-961 (FAA)

GRANT COUNTY INTL (MWH)  
MOSES LAKE, WASHINGTON



AIRPORT DIAGRAM

20254

MOSES LAKE, WASHINGTON  
GRANT COUNTY INTL (MWH)

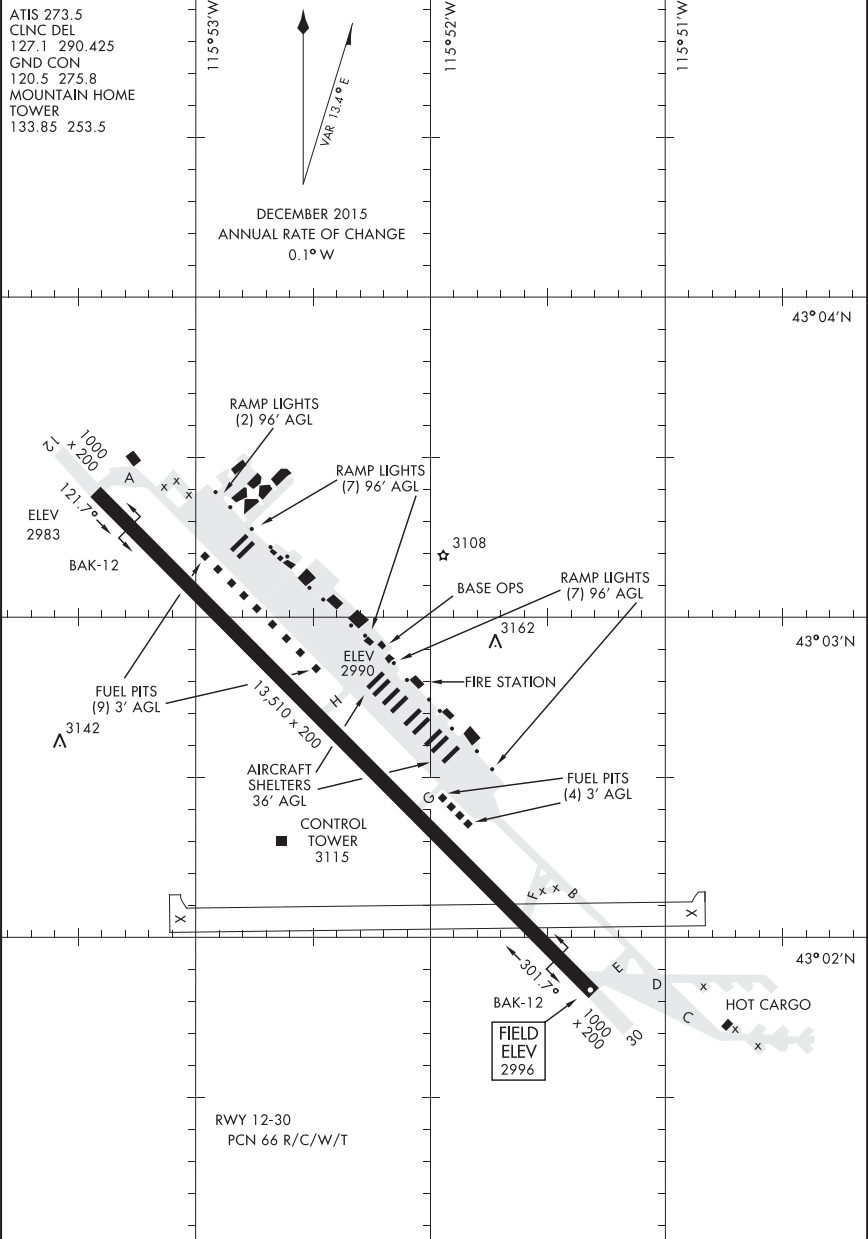
15344

AIRPORT DIAGRAM

AFD-323 [USAF]

MOUNTAIN HOME AFB (KMUO)

MOUNTAIN HOME, IDAHO



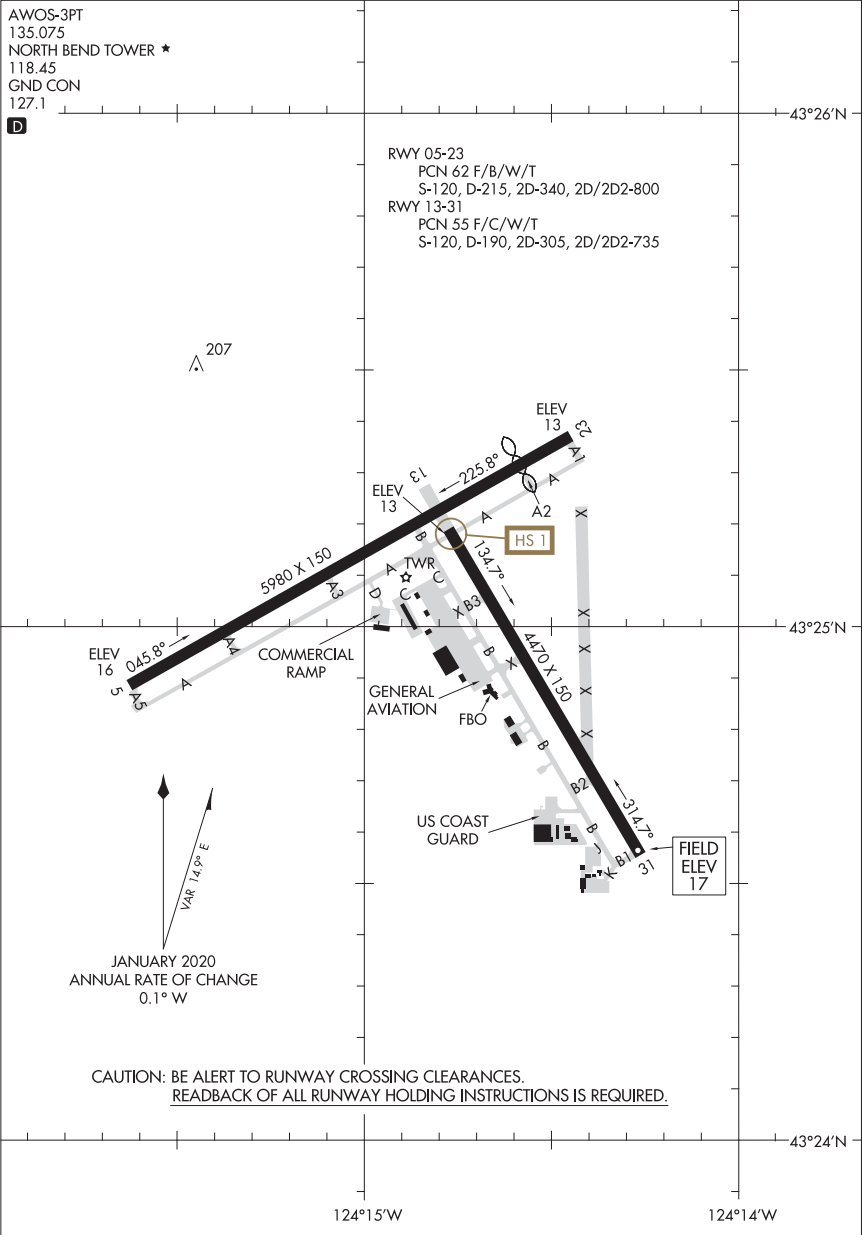
AIRPORT DIAGRAM

MOUNTAIN HOME, IDAHO  
MOUNTAIN HOME AFB (KMUO)

22195

AIRPORT DIAGRAM

AL-929 (FAA)      SOUTHWEST OREGON RGNL (OTH)  
NORTH BEND, OREGON



AIRPORT DIAGRAM

22195

NORTH BEND, OREGON  
SOUTHWEST OREGON RGNL (OTH)

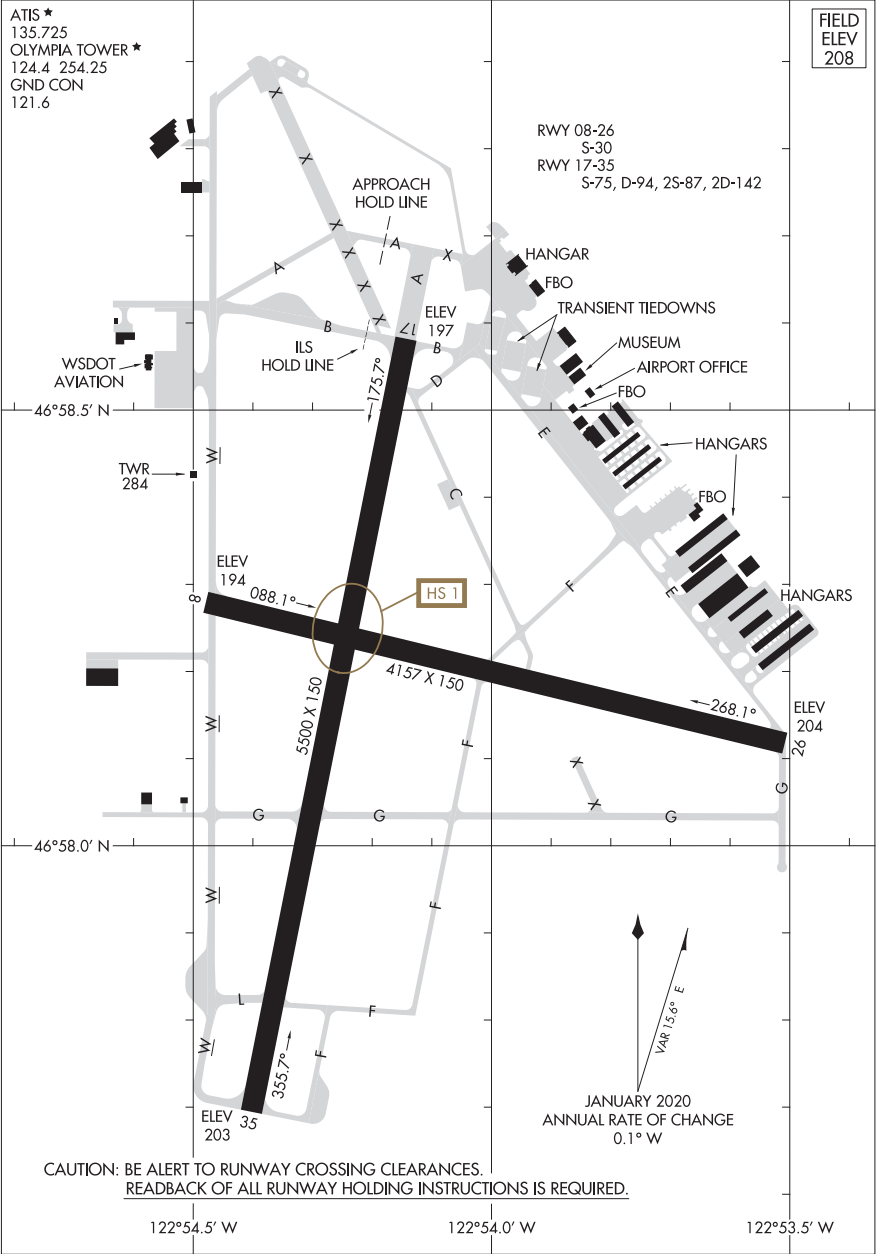


23110

AIRPORT DIAGRAM

AL-645 (FAA)

OLYMPIA RGNL (OLM)  
OLYMPIA, WASHINGTON



AIRPORT DIAGRAM

23110

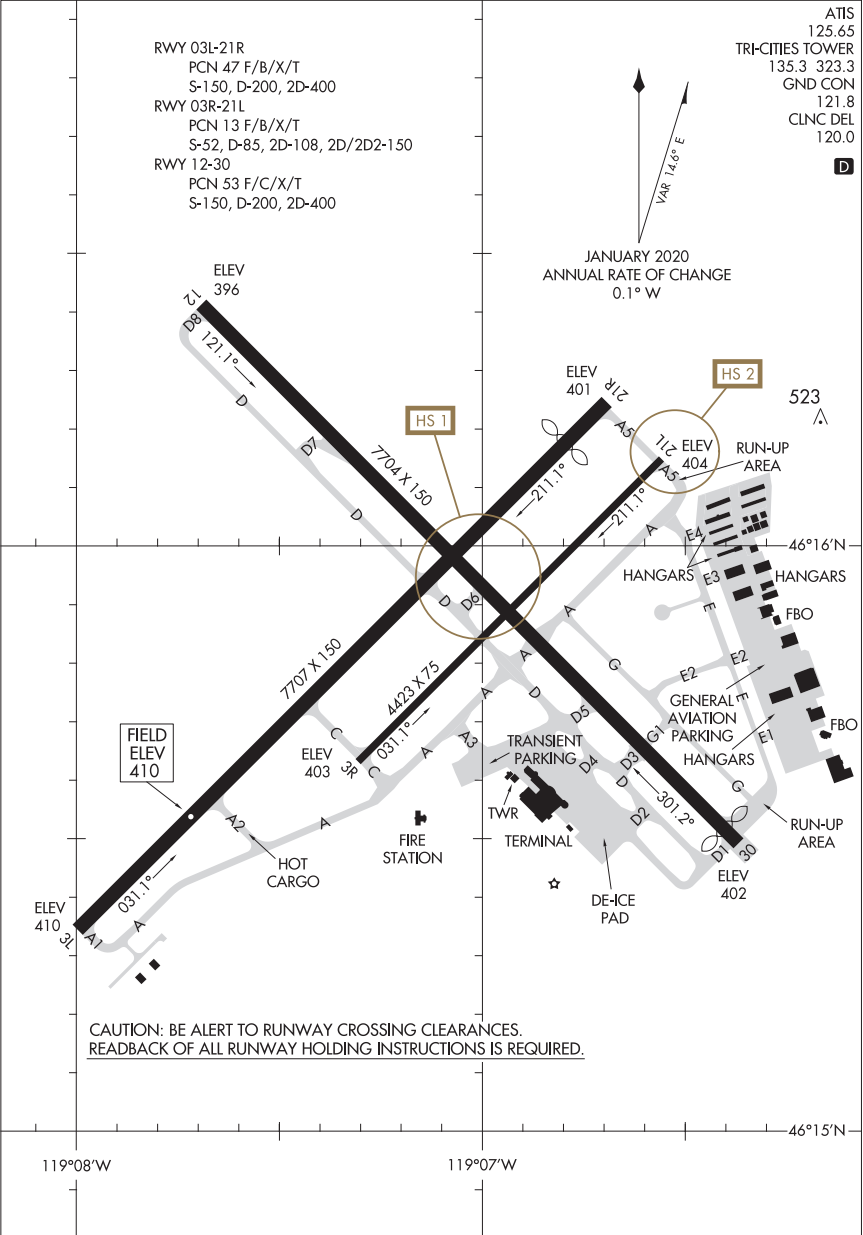
OLYMPIA, WASHINGTON  
OLYMPIA RGNL (OLM)

23166

AIRPORT DIAGRAM

AL-474 (FAA)

TRI-CITIES (PSC)  
PASCO, WASHINGTON



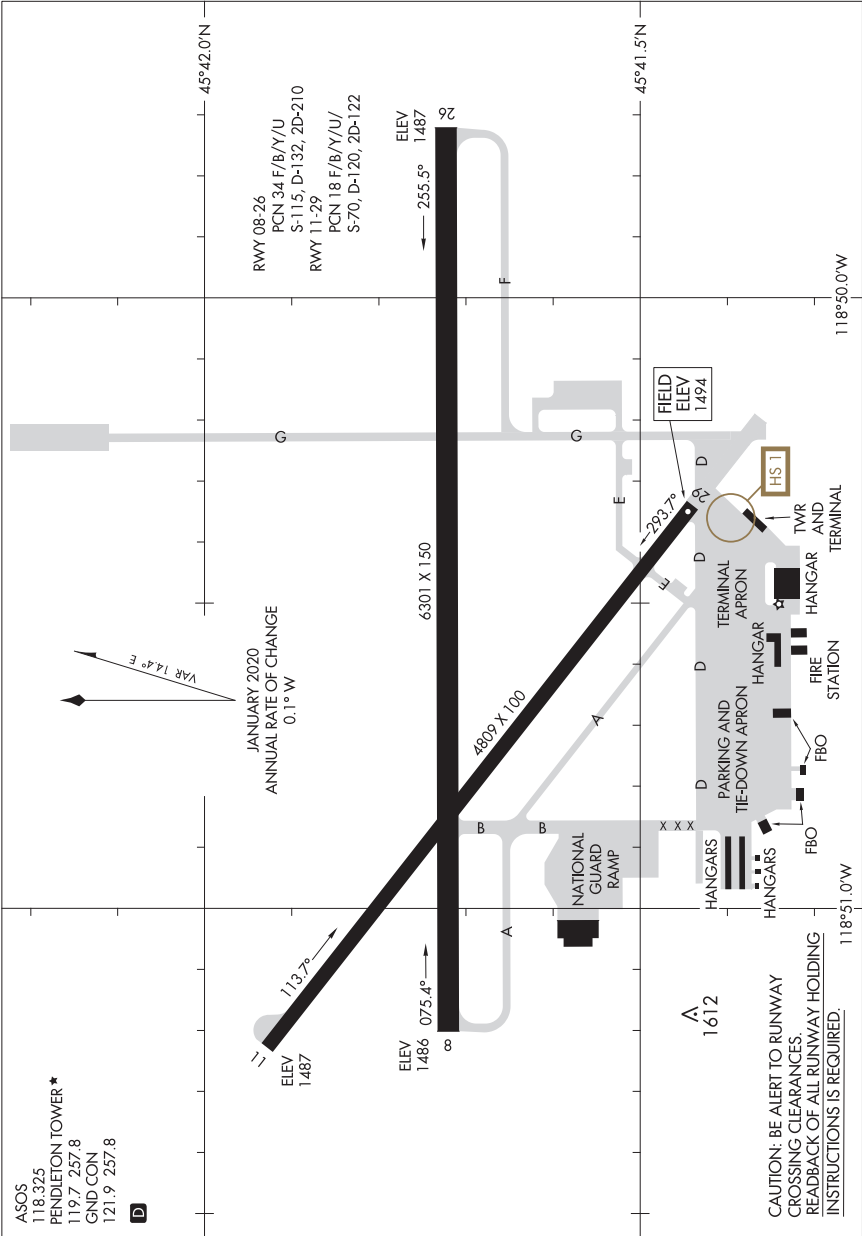
AIRPORT DIAGRAM

23166

PASCO, WASHINGTON  
TRI-CITIES (PSC)

22363  
AIRPORT DIAGRAM

EASTERN OREGON RGNL AT PENDLETON (PDT)  
AL-316 (FAA) PENDLETON, OREGON



AIRPORT DIAGRAM  
22363

PENDLETON, OREGON  
EASTERN OREGON RGNL AT PENDLETON (PDT)

## AIRPORT DIAGRAMS

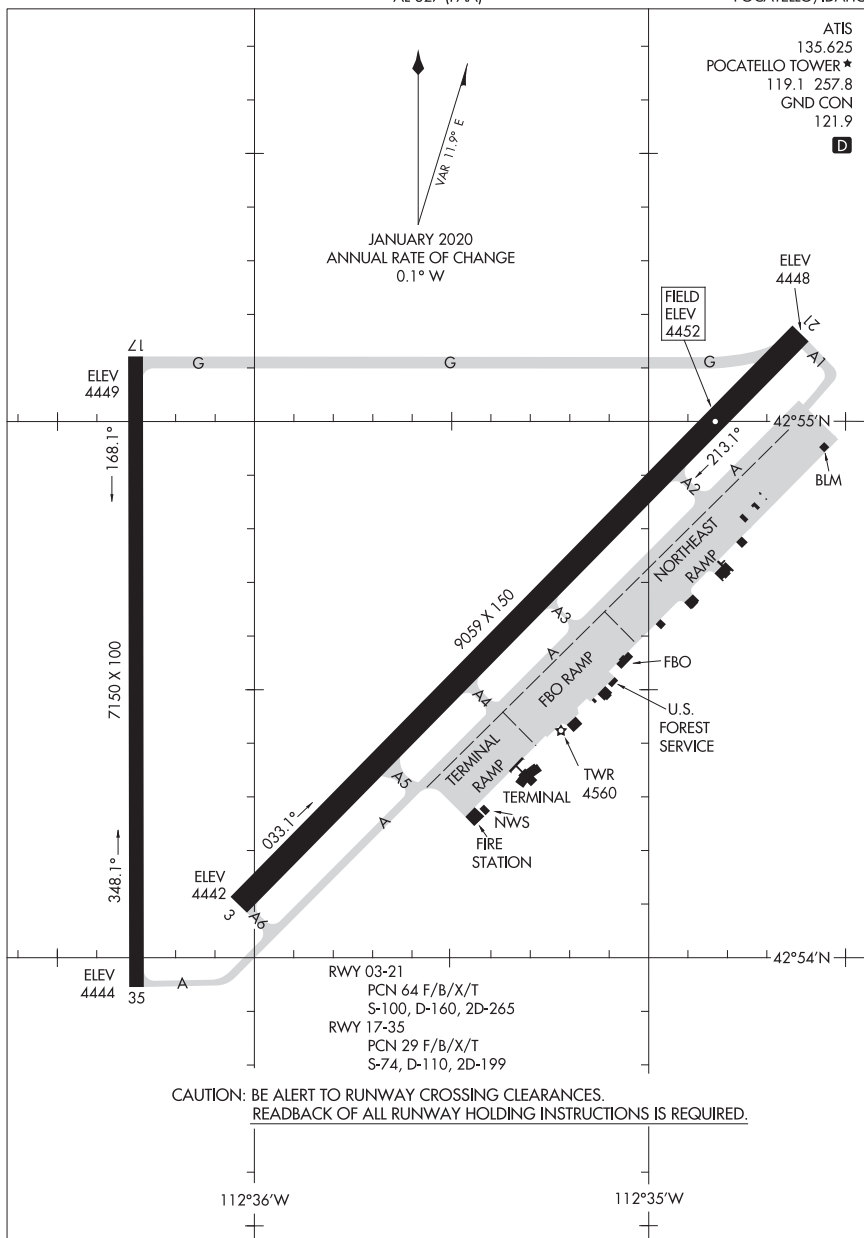
20198

## AIRPORT DIAGRAM

AL-327 (FAA)

POCATELLO RGNL (PIH)

POCATELLO, IDAHO



## AIRPORT DIAGRAM

20198

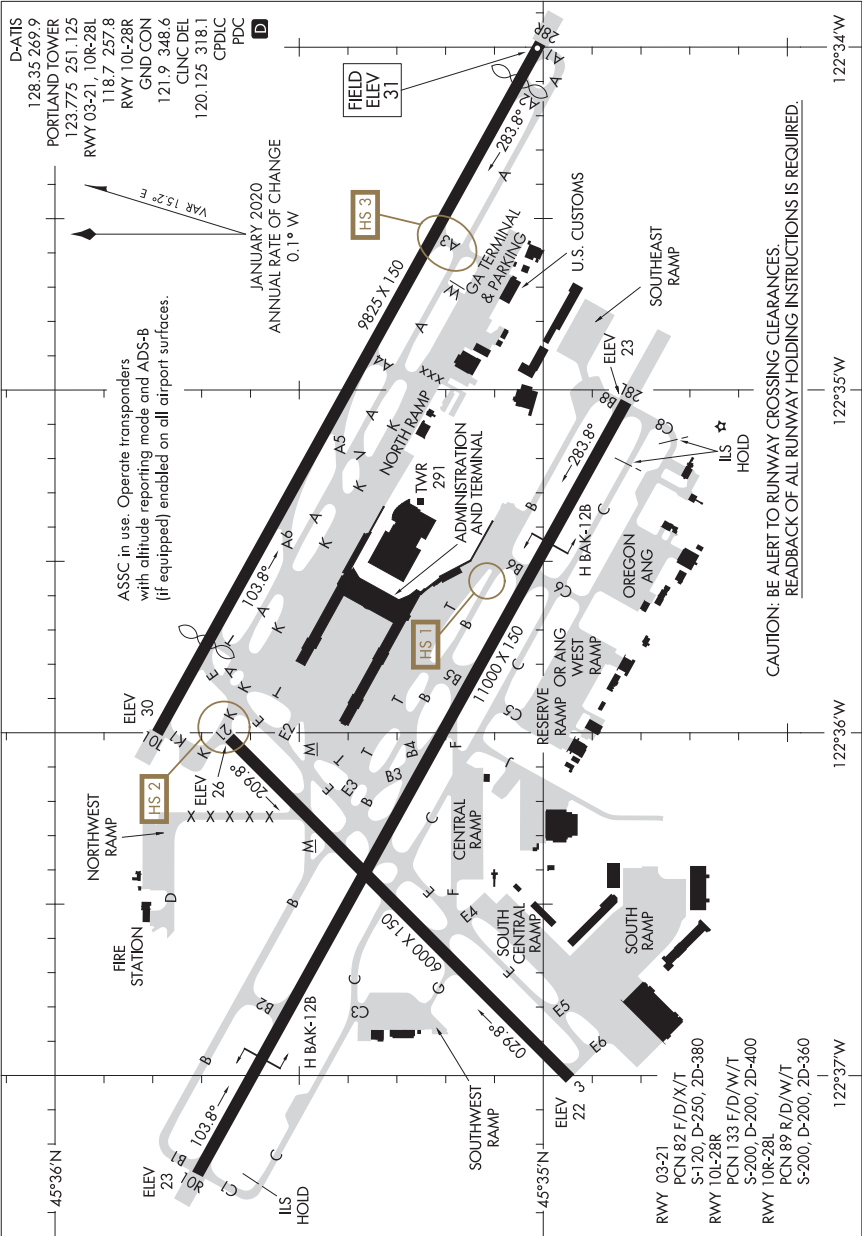
POCATELLO, IDAHO

POCATELLO RGNL (PIH)

21224

AIRPORT DIAGRAM

PORTLAND INTL (PDX)  
PORTLAND, OREGON



AIRPORT DIAGRAM

PORTLAND, OREGON  
PORTLAND INTL (PDX)

21224



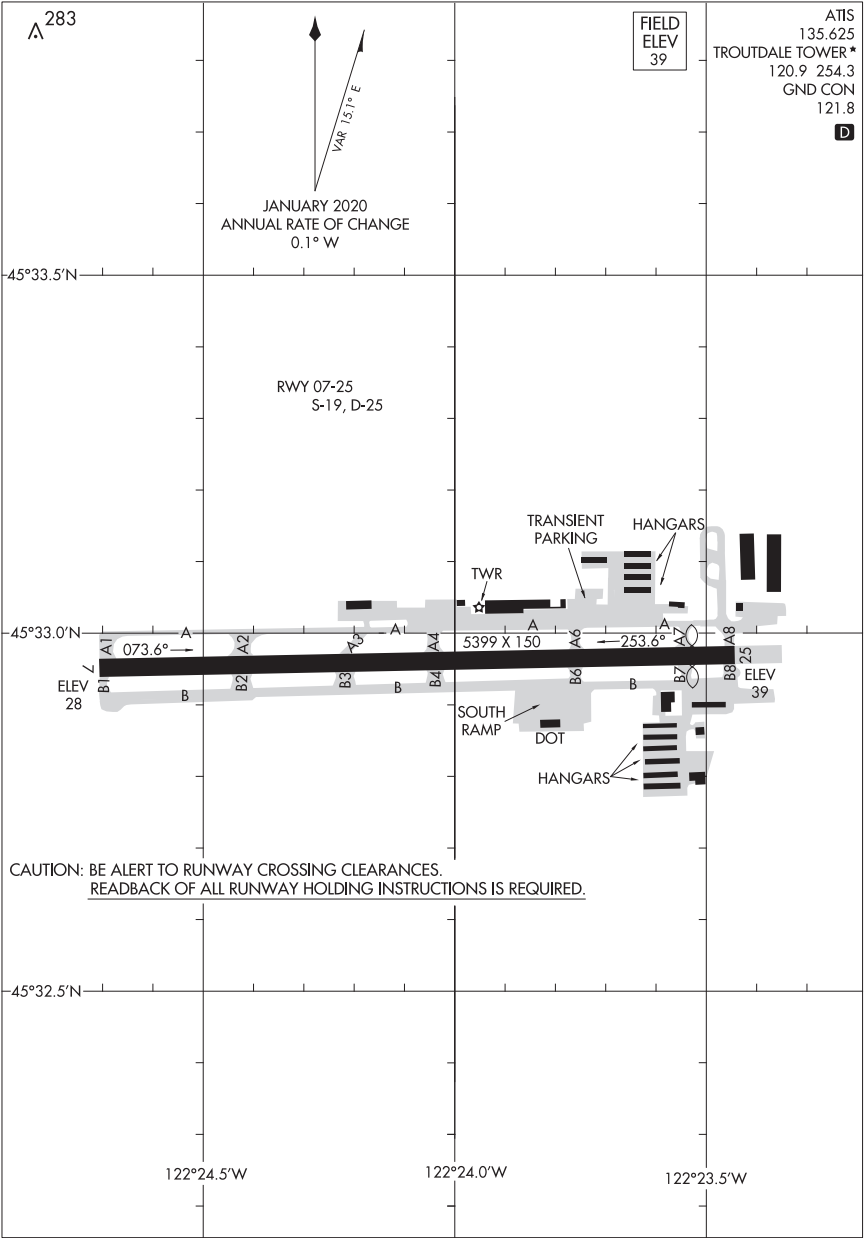
20086

AIRPORT DIAGRAM

AL-649 (FAA)

PORTLAND-TROUTDALE (TTD)

PORTLAND, OREGON

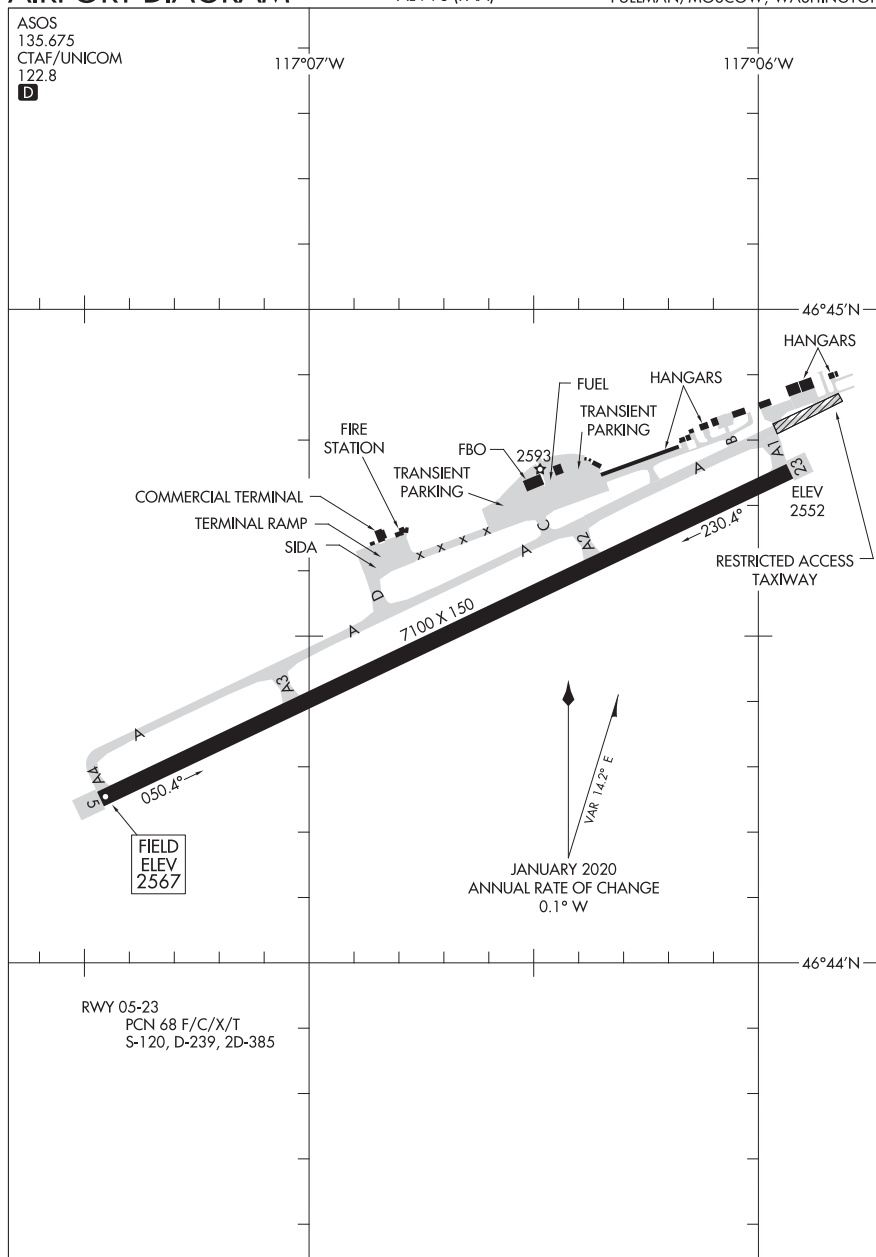


22083

# AIRPORT DIAGRAM

AL-798 (FAA)

PULLMAN/MOSCOW RGNL (PUW)  
PULLMAN/MOSCOW, WASHINGTON



## AIRPORT DIAGRAM

22083

PULLMAN/MOSCOW, WASHINGTON  
PULLMAN/MOSCOW RGNL (PUW)

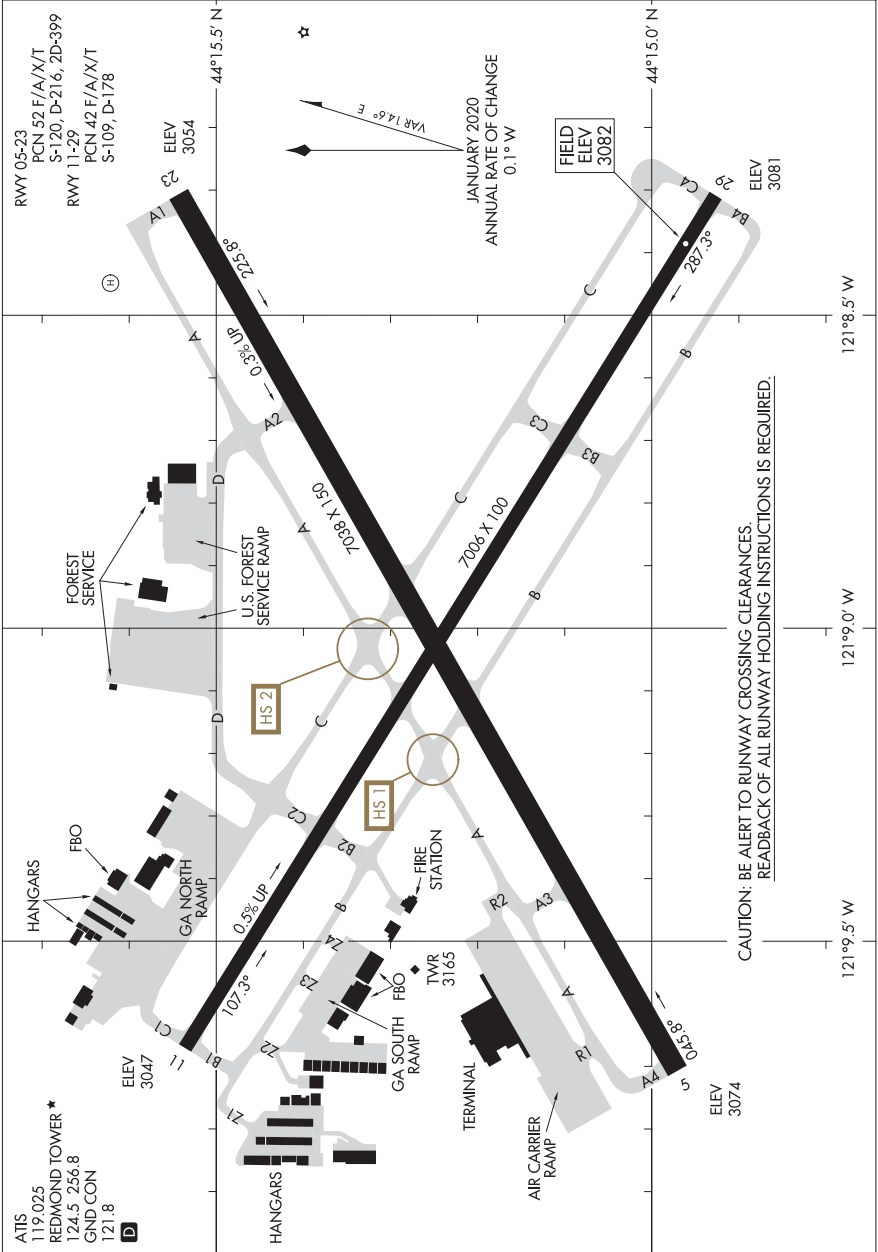


23222

AIRPORT DIAGRAM

AL-345 (FAA)

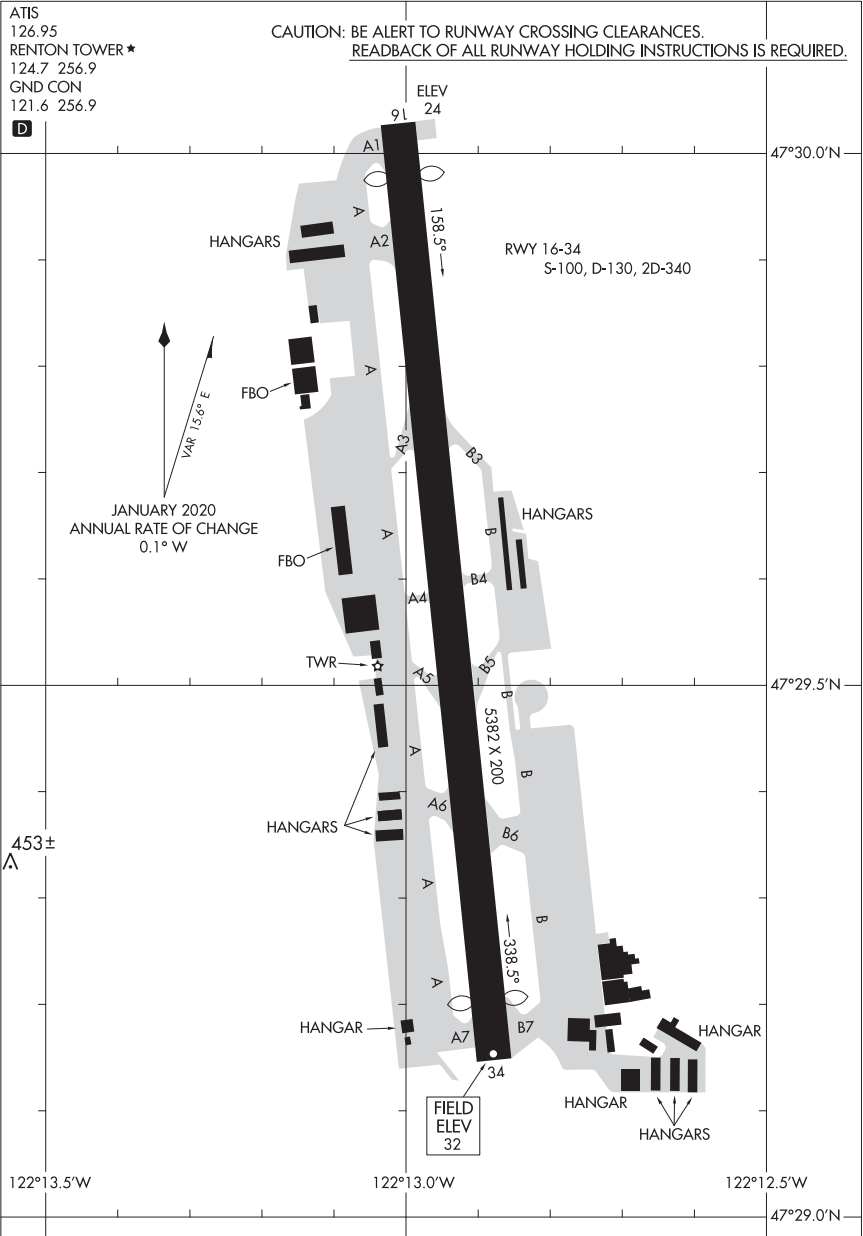
ROBERTS FLD (R.D.M.)  
REDMOND, OREGON



AIRPORT DIAGRAM

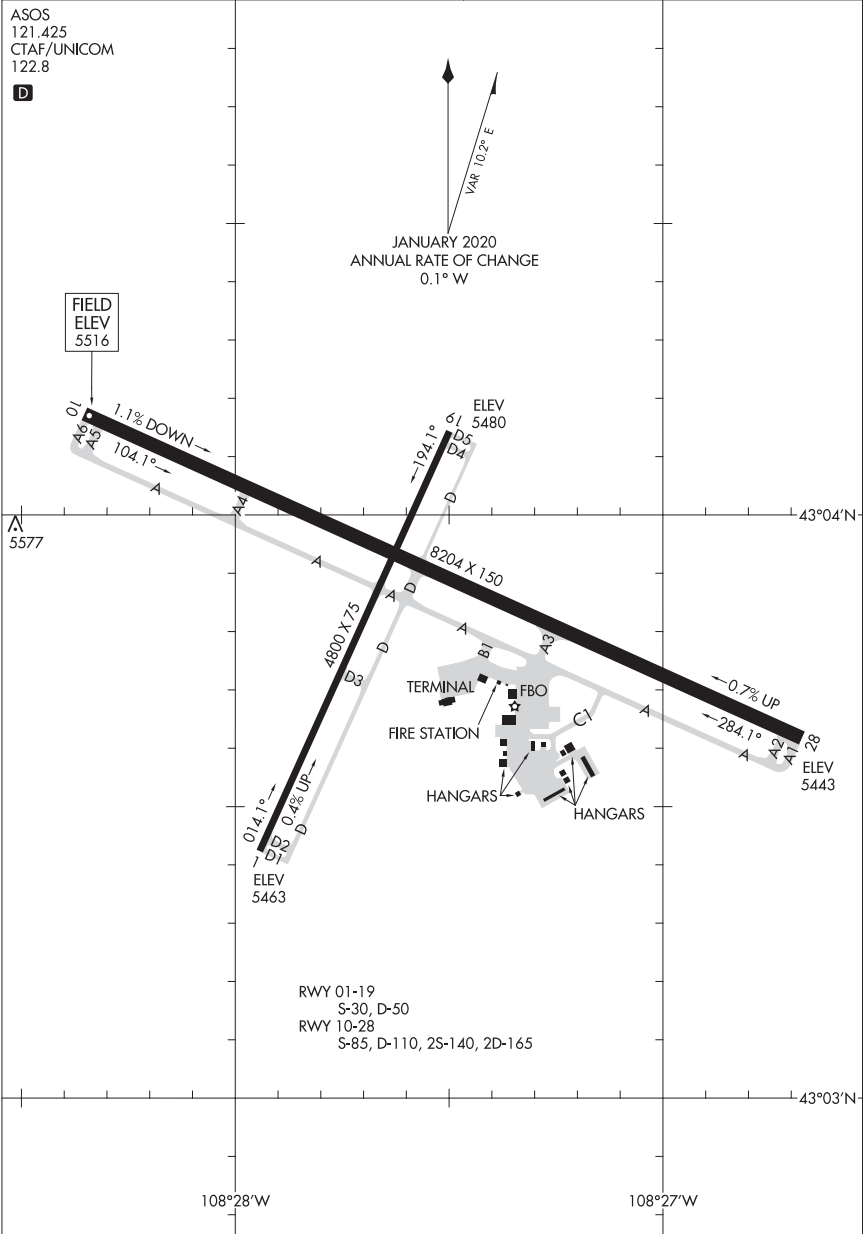
REDMOND, OREGON  
ROBERTS FLD (R.D.M.)

23222



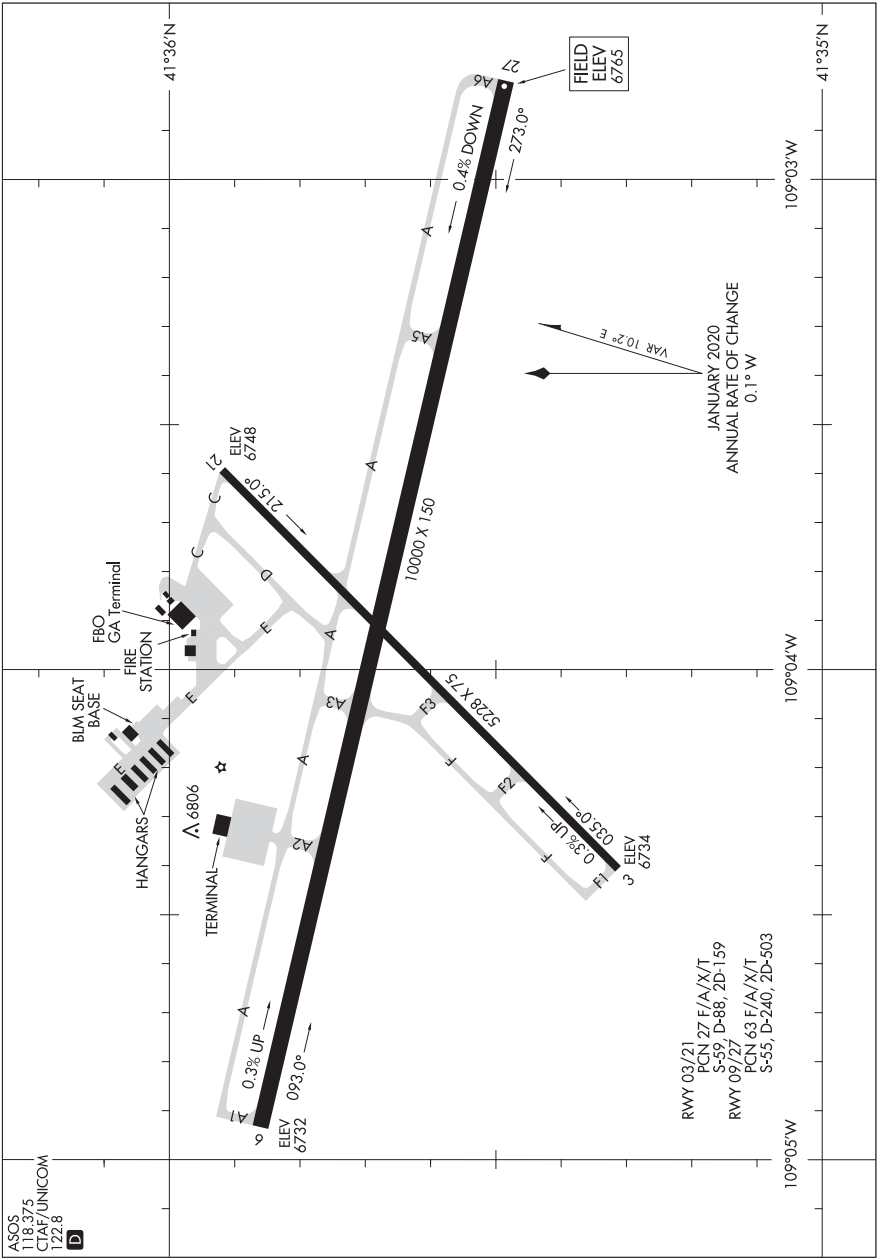
20310  
AIRPORT DIAGRAM

CENTRAL WYOMING RGNL (RIW)  
RIVERTON, WYOMING



AIRPORT DIAGRAM  
20310

RIVERTON, WYOMING  
CENTRAL WYOMING RGNL (RIW)

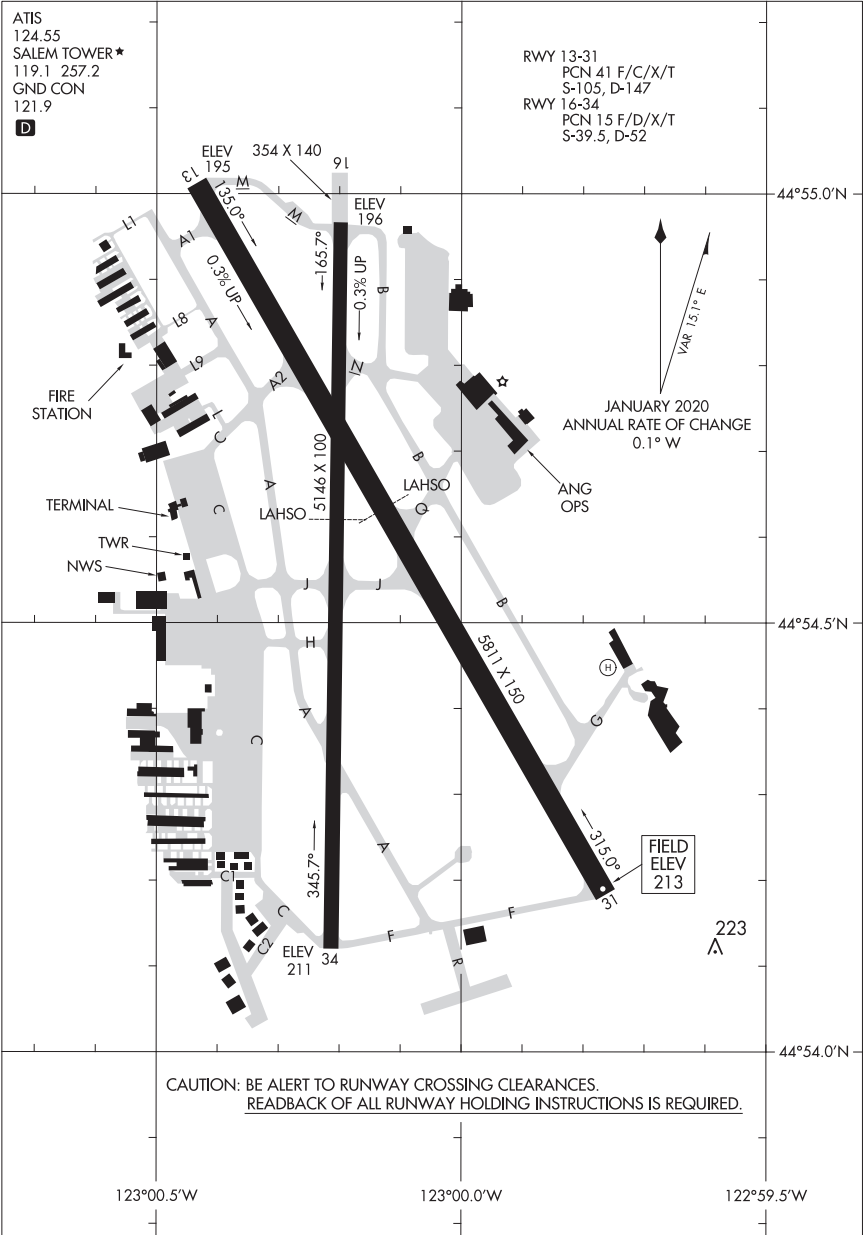


22251

AIRPORT DIAGRAM

AL-361 (FAA)

MCNARY FLD (SLE)  
SALEM, OREGON



AIRPORT DIAGRAM

22251

SALEM, OREGON  
MCNARY FLD (SLE)

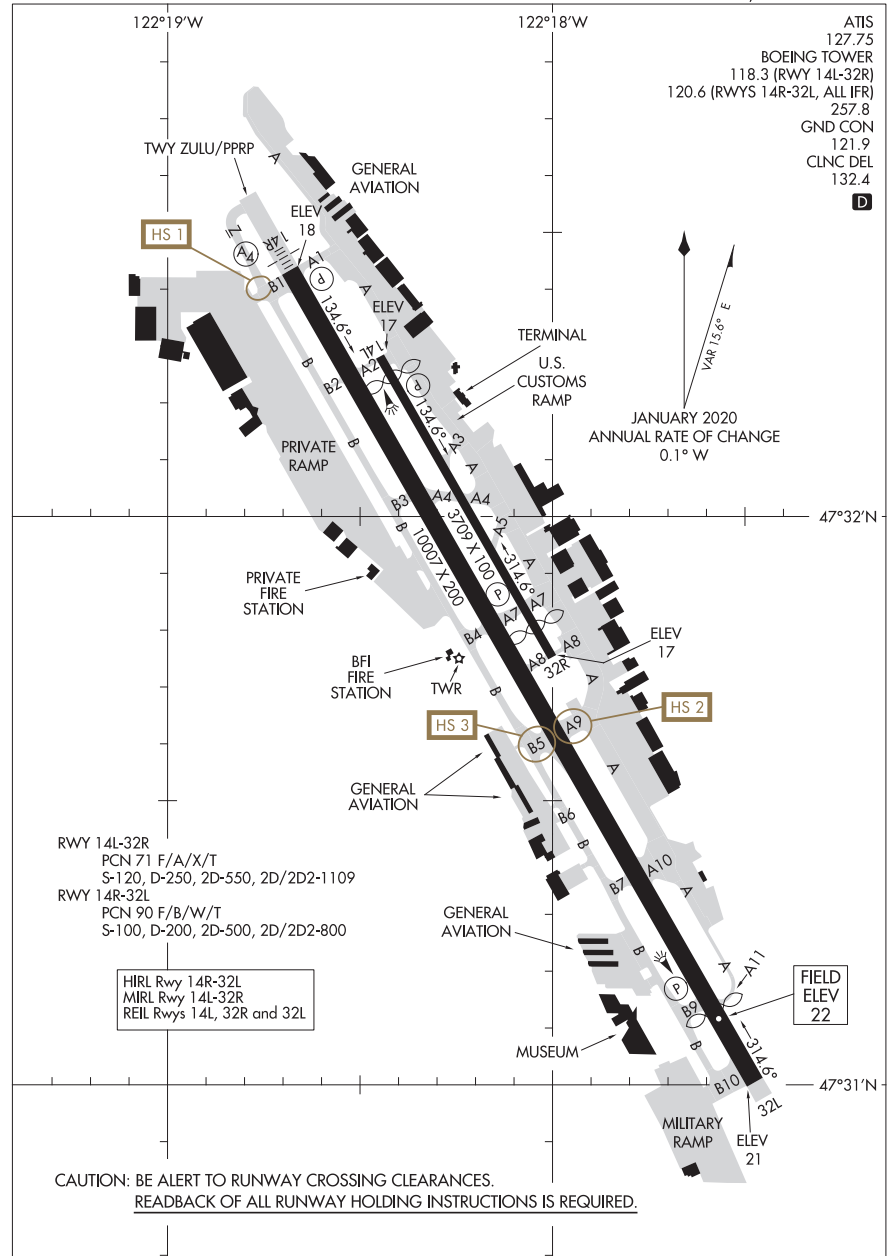
24025

AIRPORT DIAGRAM

AL-384 (FAA)

BOEING FLD/KING COUNTY INTL (BFI)

SEATTLE, WASHINGTON



AIRPORT DIAGRAM

SEATTLE, WASHINGTON

BOEING FLD/KING COUNTY INTL (BFI)

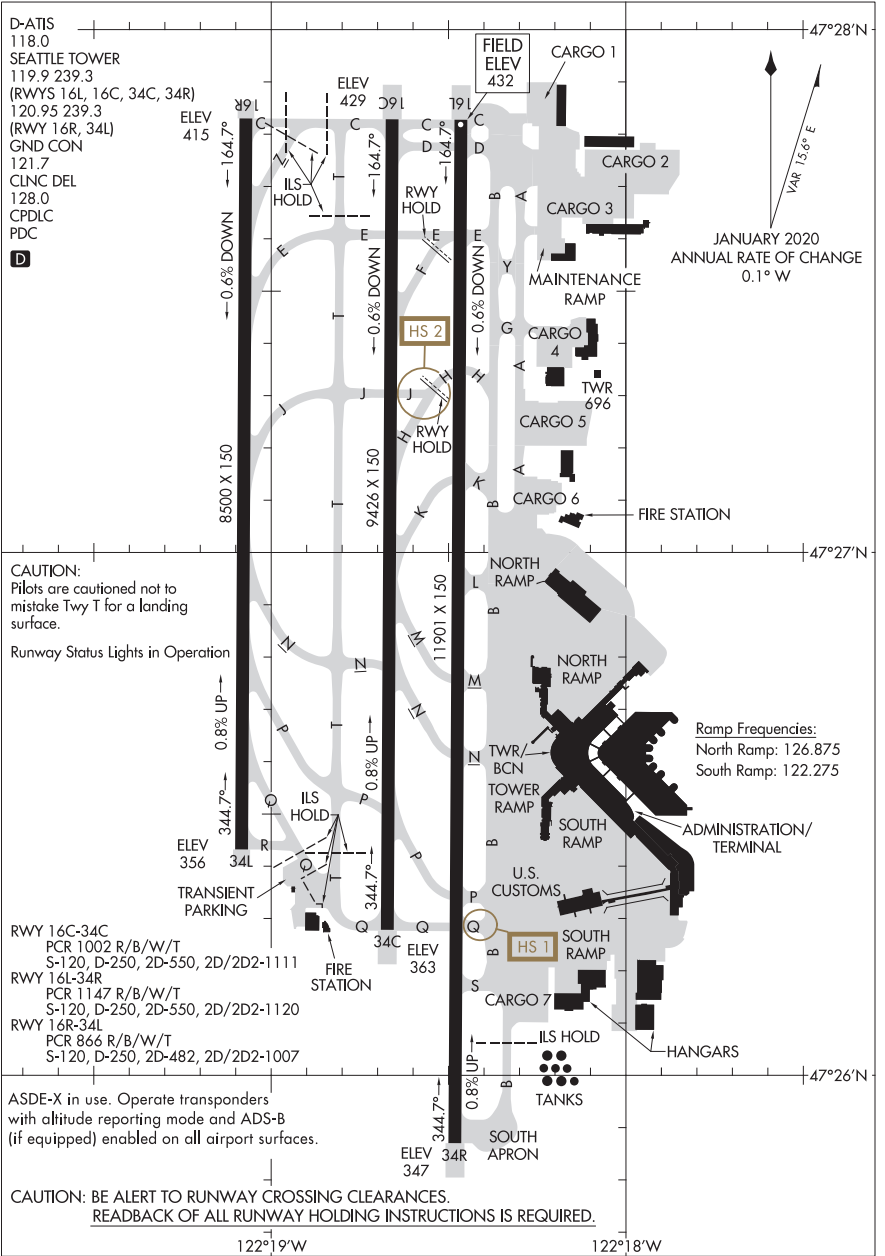
24025

23334

AIRPORT DIAGRAM

AL-582 (FAA)

SEATTLE-TACOMA INTL (SEA)  
SEATTLE, WASHINGTON



AIRPORT DIAGRAM

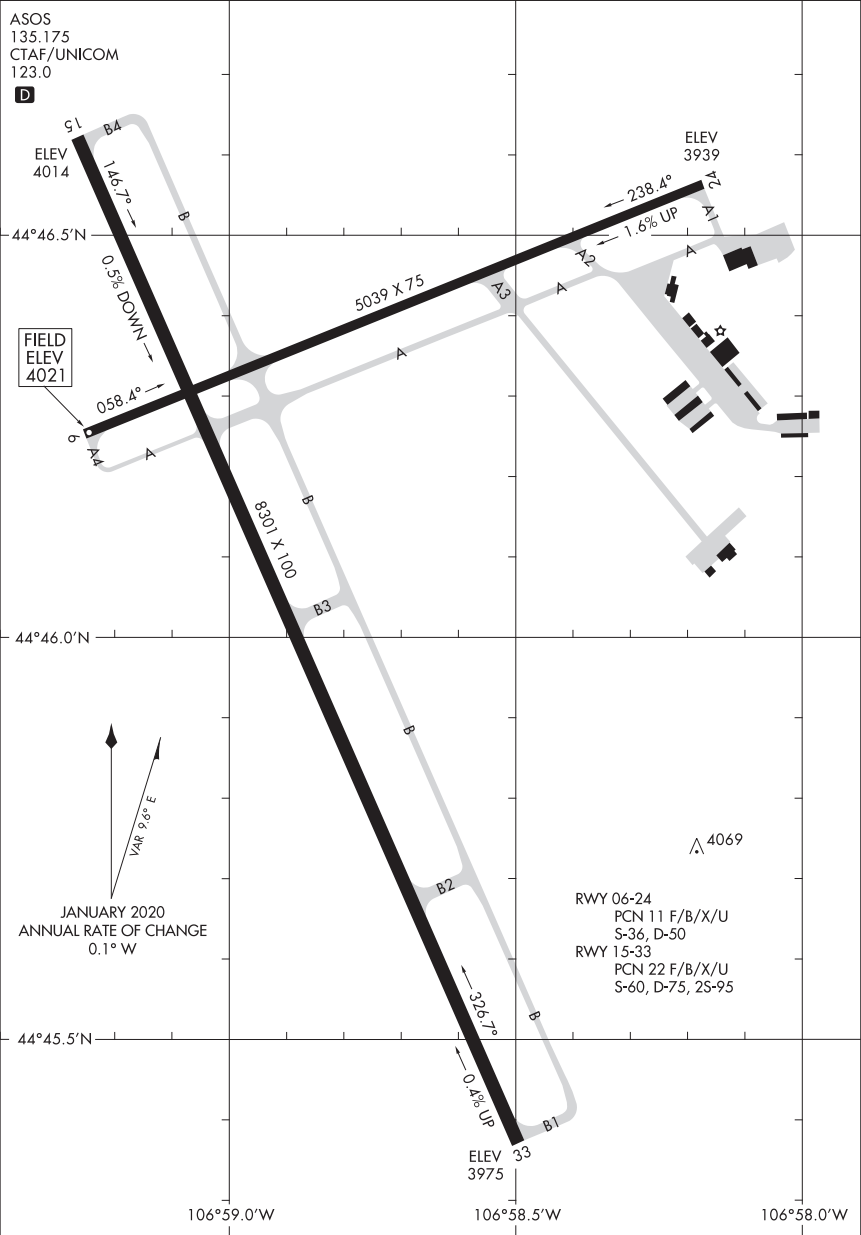
23334

SEATTLE, WASHINGTON  
SEATTLE-TACOMA INTL (SEA)

20086  
AIRPORT DIAGRAM

AL-388 (FAA)

SHERIDAN COUNTY (SHR)  
SHERIDAN, WYOMING



AIRPORT DIAGRAM  
20086

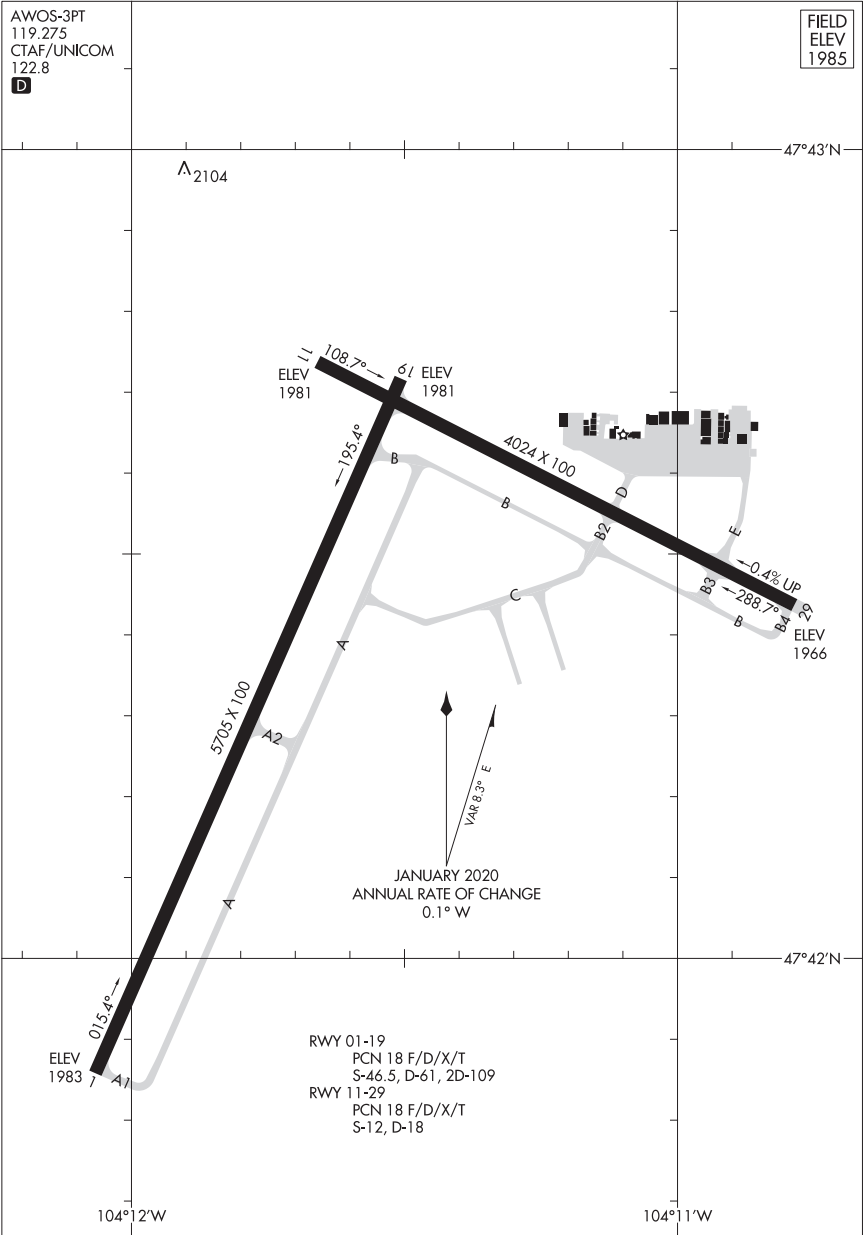
SHERIDAN, WYOMING  
SHERIDAN COUNTY (SHR)



21168  
AIRPORT DIAGRAM

AL-5303 (FAA)

SIDNEY-RICHLAND RGNL (SDY)  
SIDNEY, MONTANA



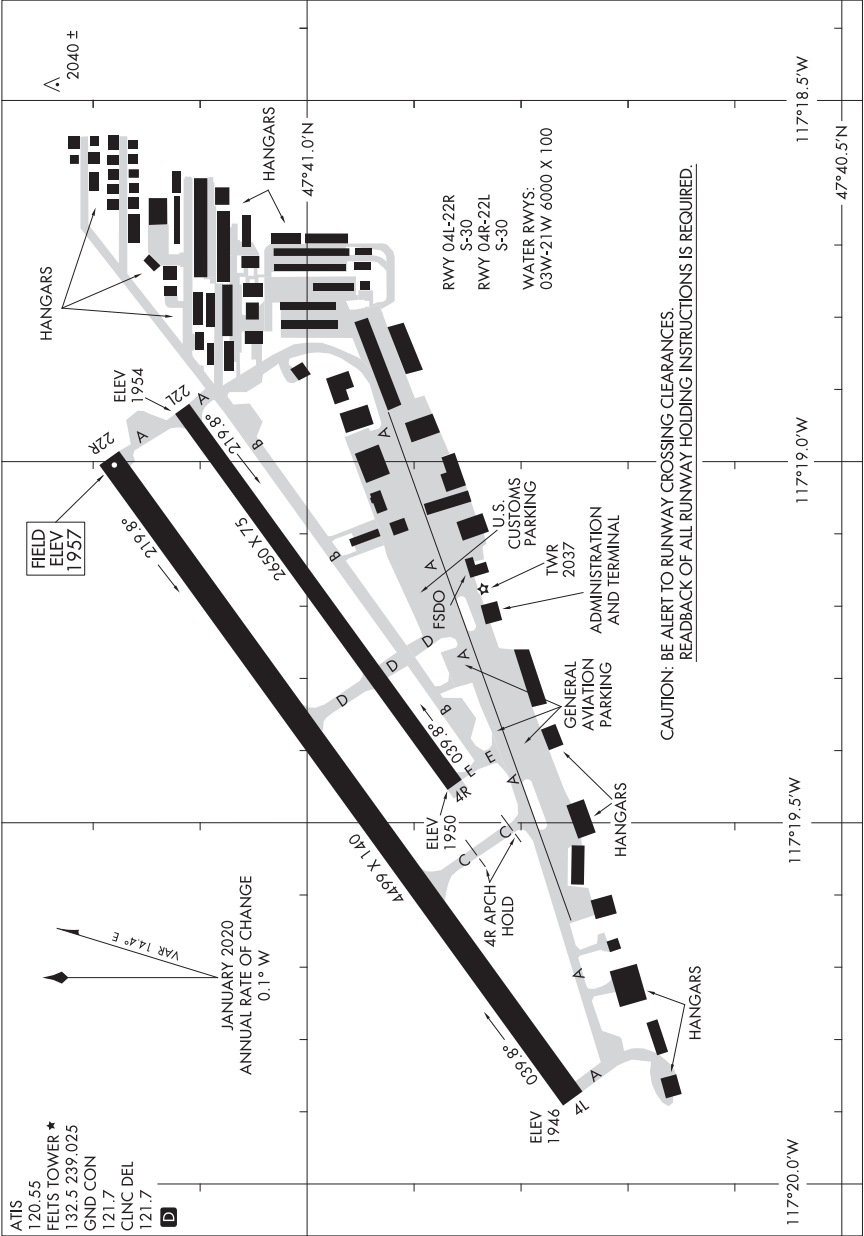
AIRPORT DIAGRAM  
21168

SIDNEY, MONTANA  
SIDNEY-RICHLAND RGNL (SDY)

21112  
AIRPORT DIAGRAM

AL-402 (FAA)

FELTS FLD (SFF)  
SPOKANE, WASHINGTON



AIRPORT DIAGRAM  
21112

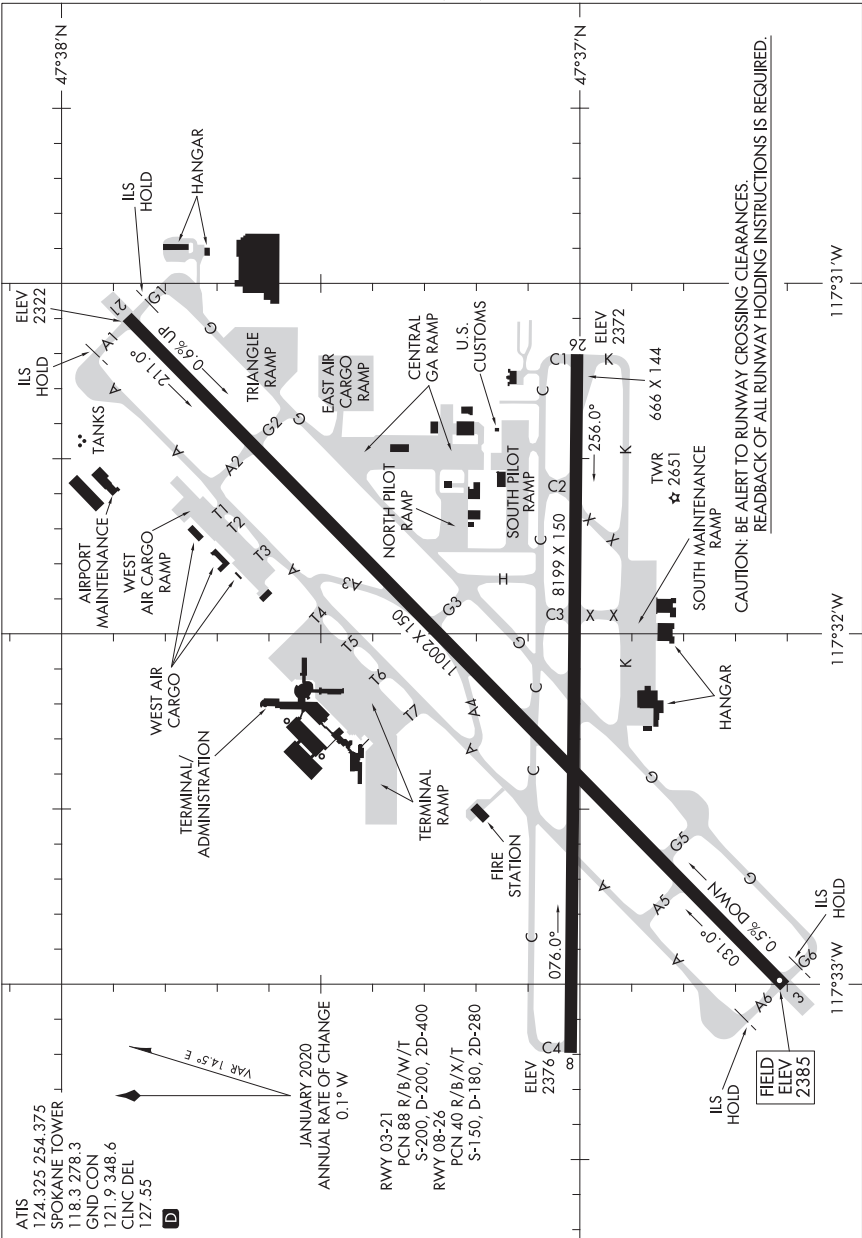
SPOKANE, WASHINGTON  
FELTS FLD (SFF)

22363

AIRPORT DIAGRAM

AL-403 (FAA)

SPOKANE INTL (GEG)  
SPOKANE, WASHINGTON



AIRPORT DIAGRAM

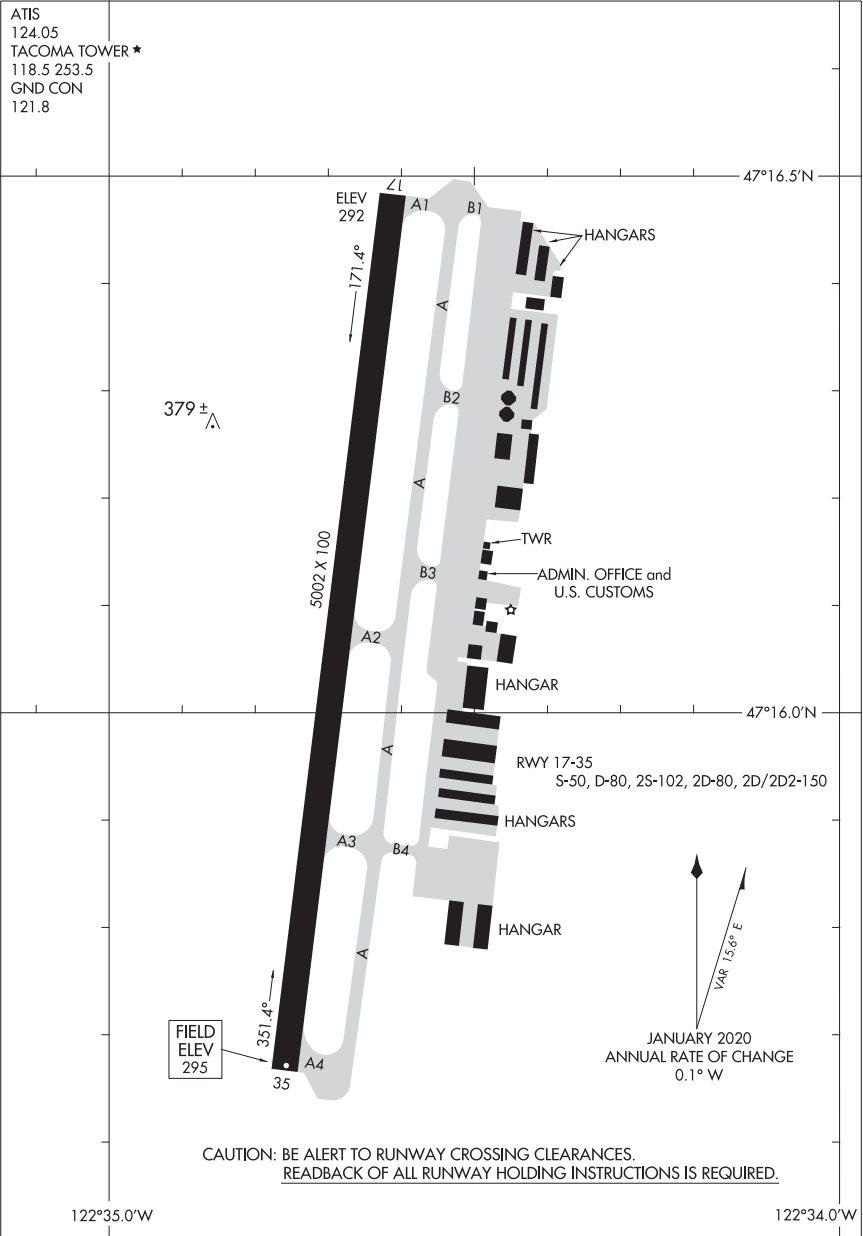
SPOKANE, WASHINGTON  
SPOKANE INTL (GEG)

22363

20086  
AIRPORT DIAGRAM

AL-5186 (FAA)

TACOMA NARROWS (TIW)  
TACOMA, WASHINGTON



AIRPORT DIAGRAM  
20086

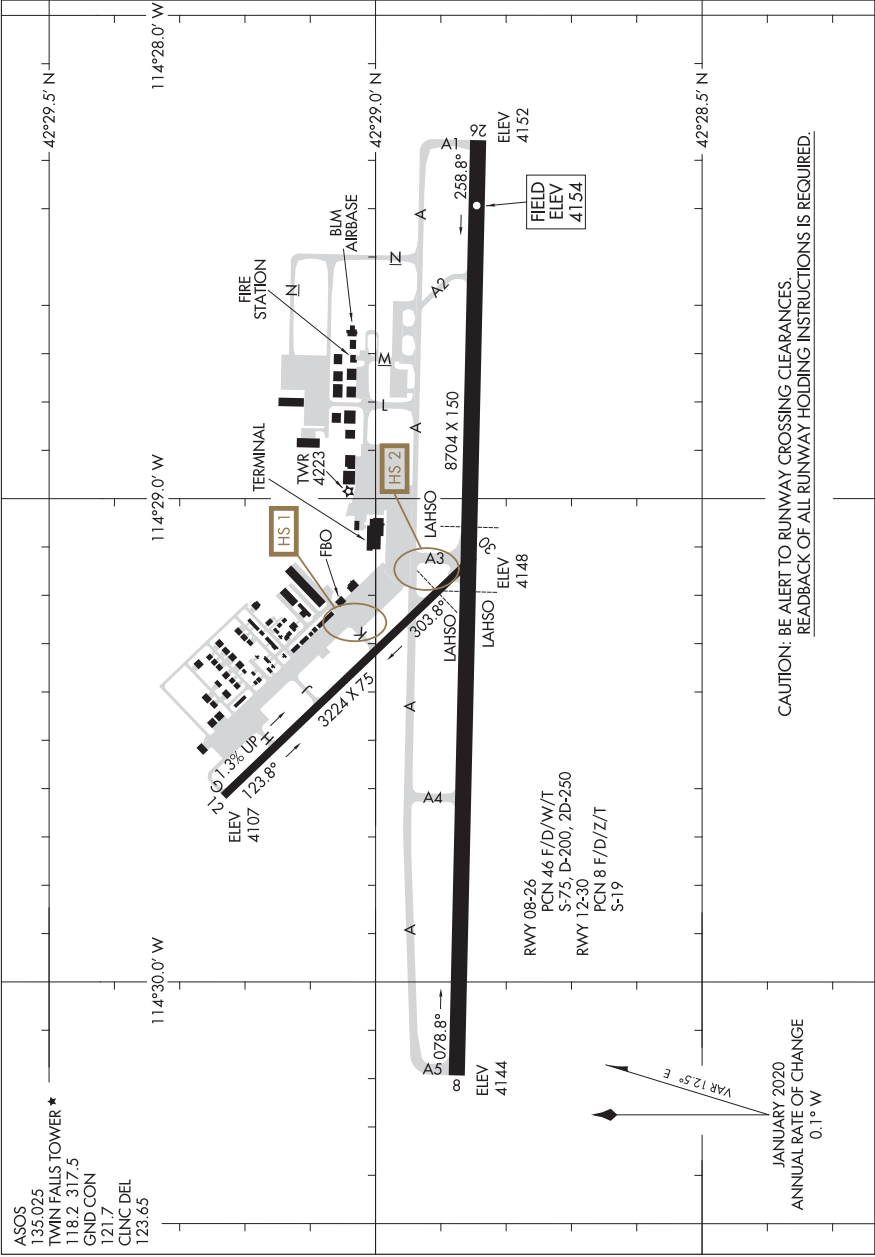
TACOMA, WASHINGTON  
TACOMA NARROWS (TIW)

22139

AIRPORT DIAGRAM

AL-885 (FAA)

JOSLIN FLD/MAGIC VALLEY RGNL (TWF)  
TWIN FALLS, IDAHO



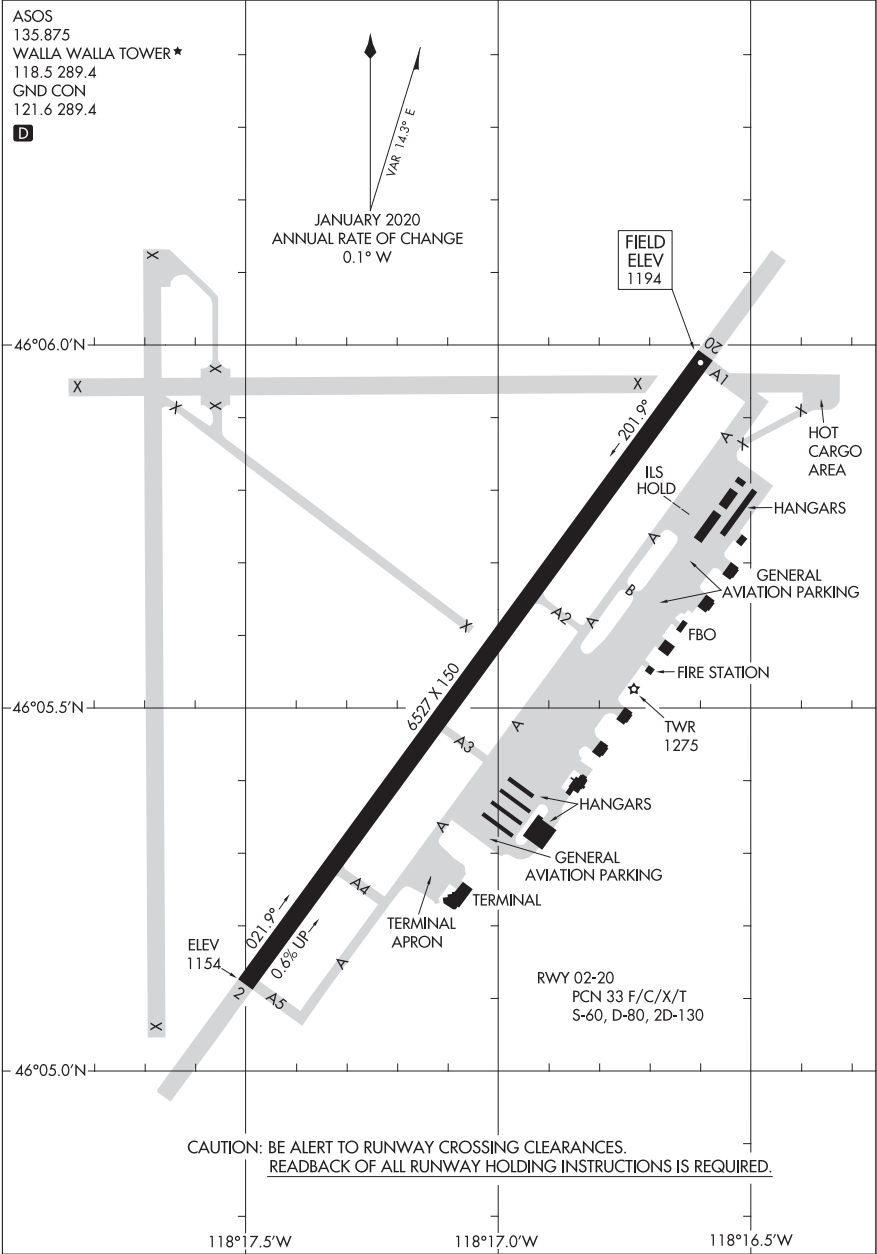
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.  
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

AIRPORT DIAGRAM

TWIN FALLS, IDAHO

JOSLIN FLD/MAGIC VALLEY RGNL (TWF)

22139



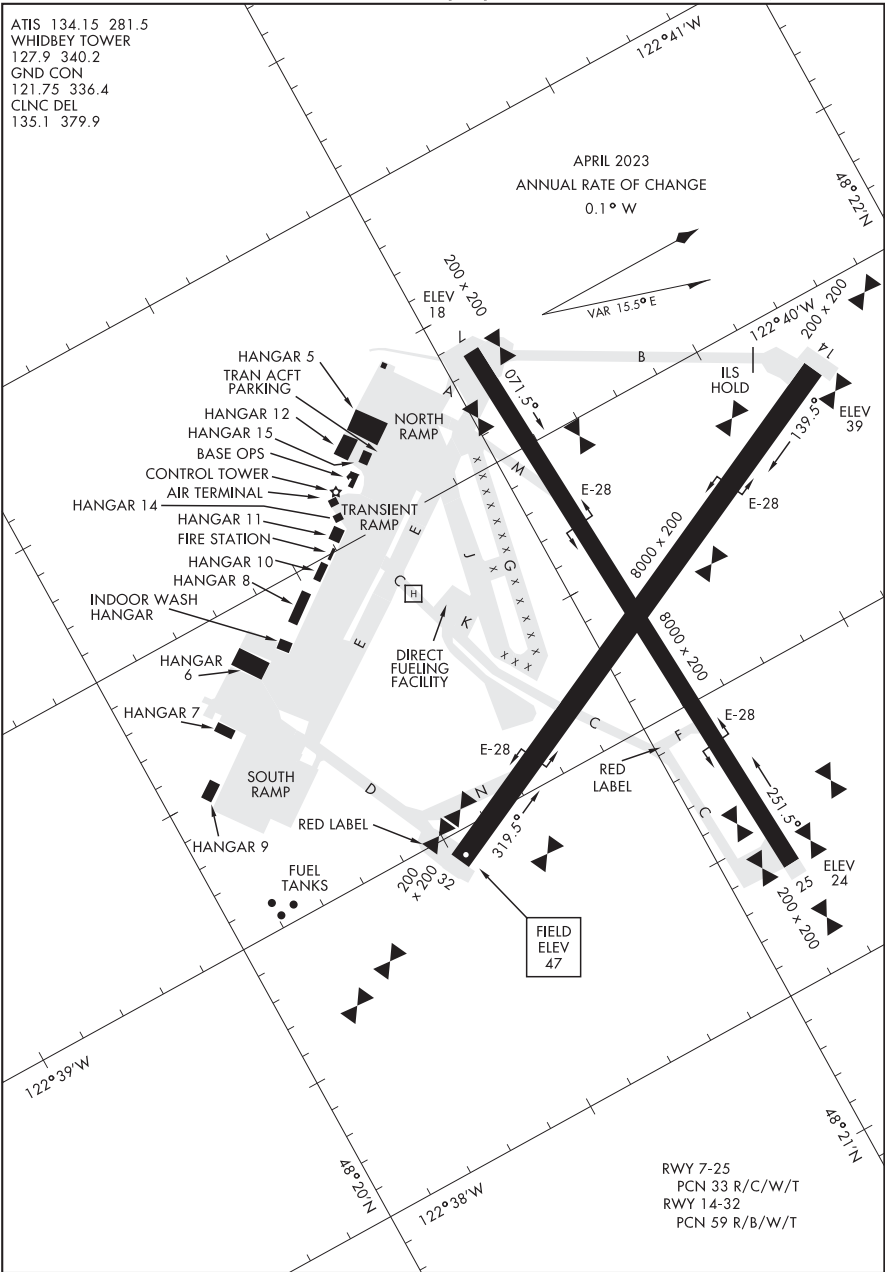
23222

AIRPORT DIAGRAM

WHIDBEY ISLAND NAS (AULT FLD) (KNUW)

AL-451 [USN]

OAK HARBOR, WASHINGTON



AIRPORT DIAGRAM

OAK HARBOR, WASHINGTON

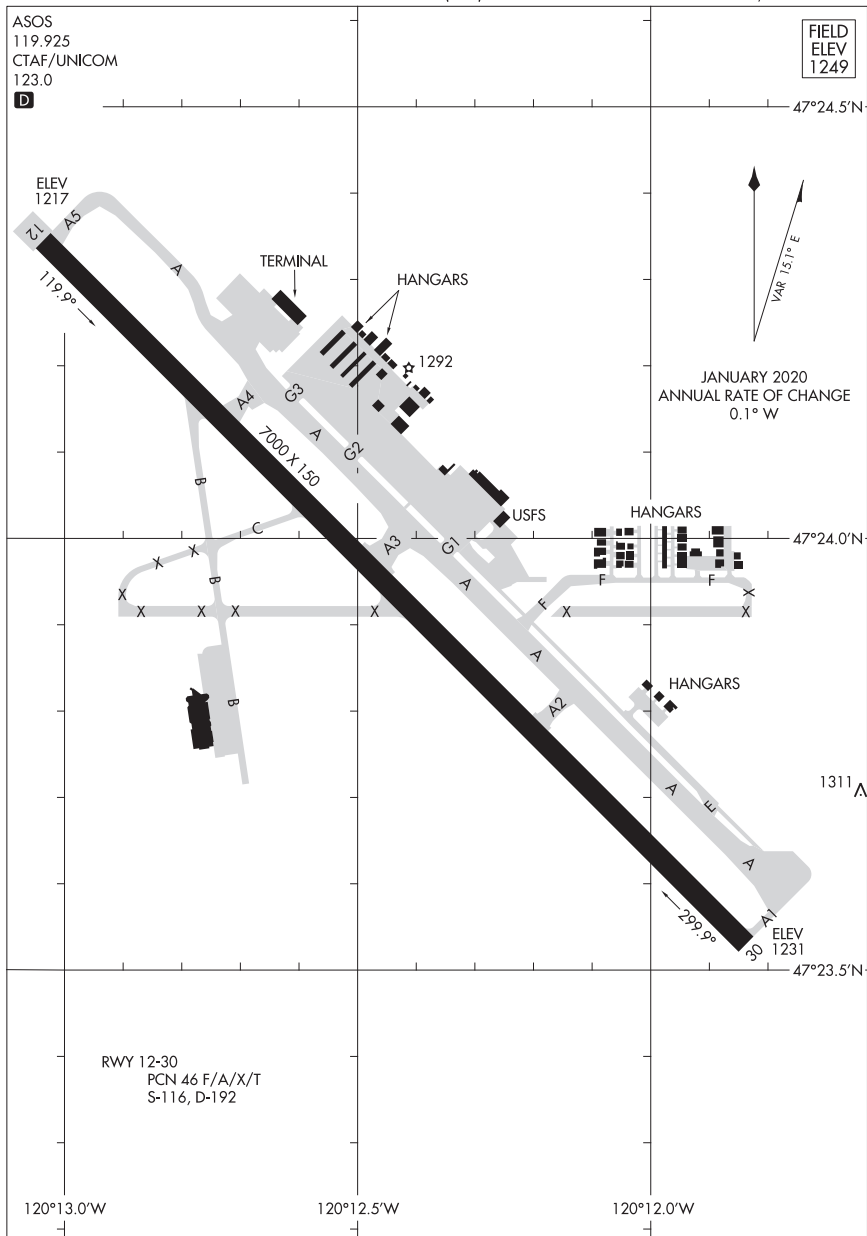
WHIDBEY ISLAND NAS (AULT FLD) (KNUW)

23278

## AIRPORT DIAGRAM

AL-641 (FAA)

PANGBORN MEML (EAT)  
WENATCHEE, WASHINGTON



## AIRPORT DIAGRAM

23278

WENATCHEE, WASHINGTON  
PANGBORN MEML (EAT)

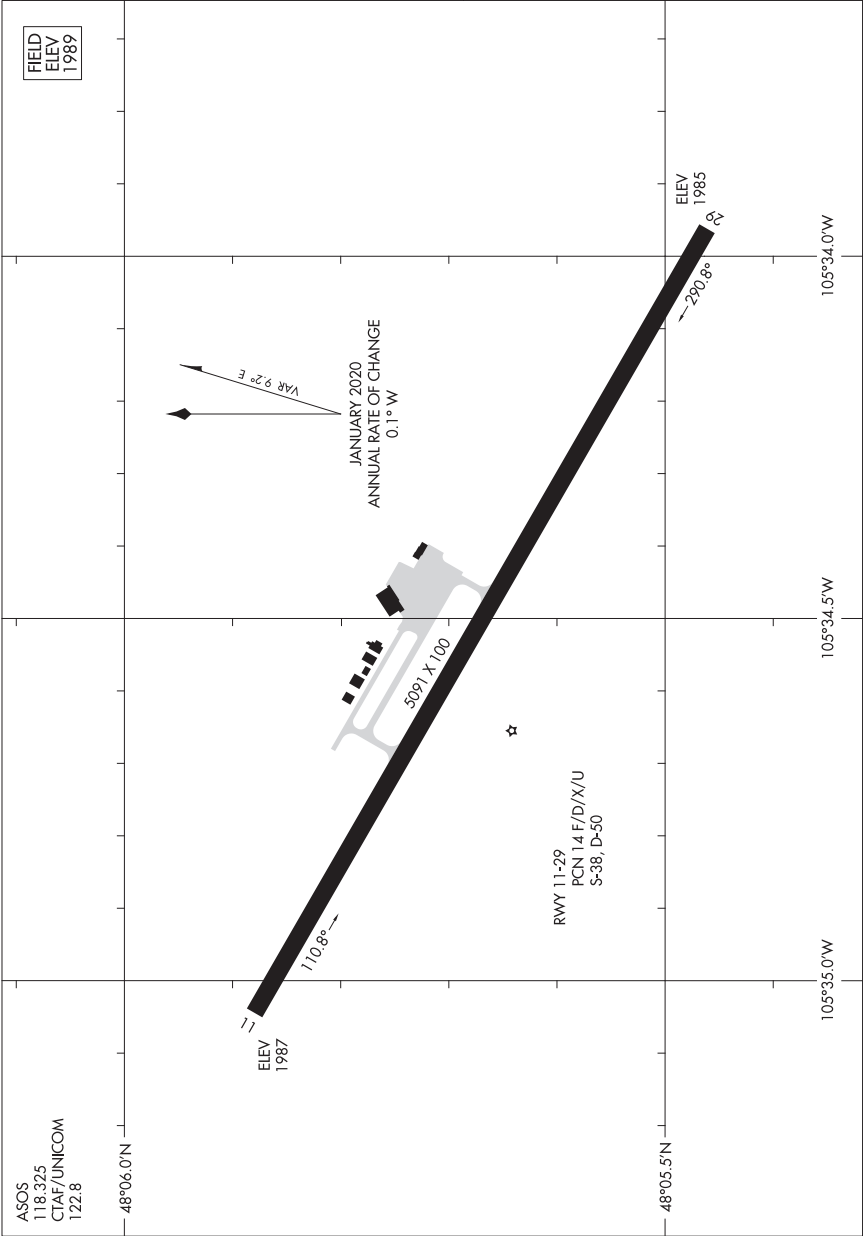


20086

AIRPORT DIAGRAM

AL-6018 (FAA)

L M CLAYTON (OLF)  
WOLF POINT, MONTANA



AIRPORT DIAGRAM

20086

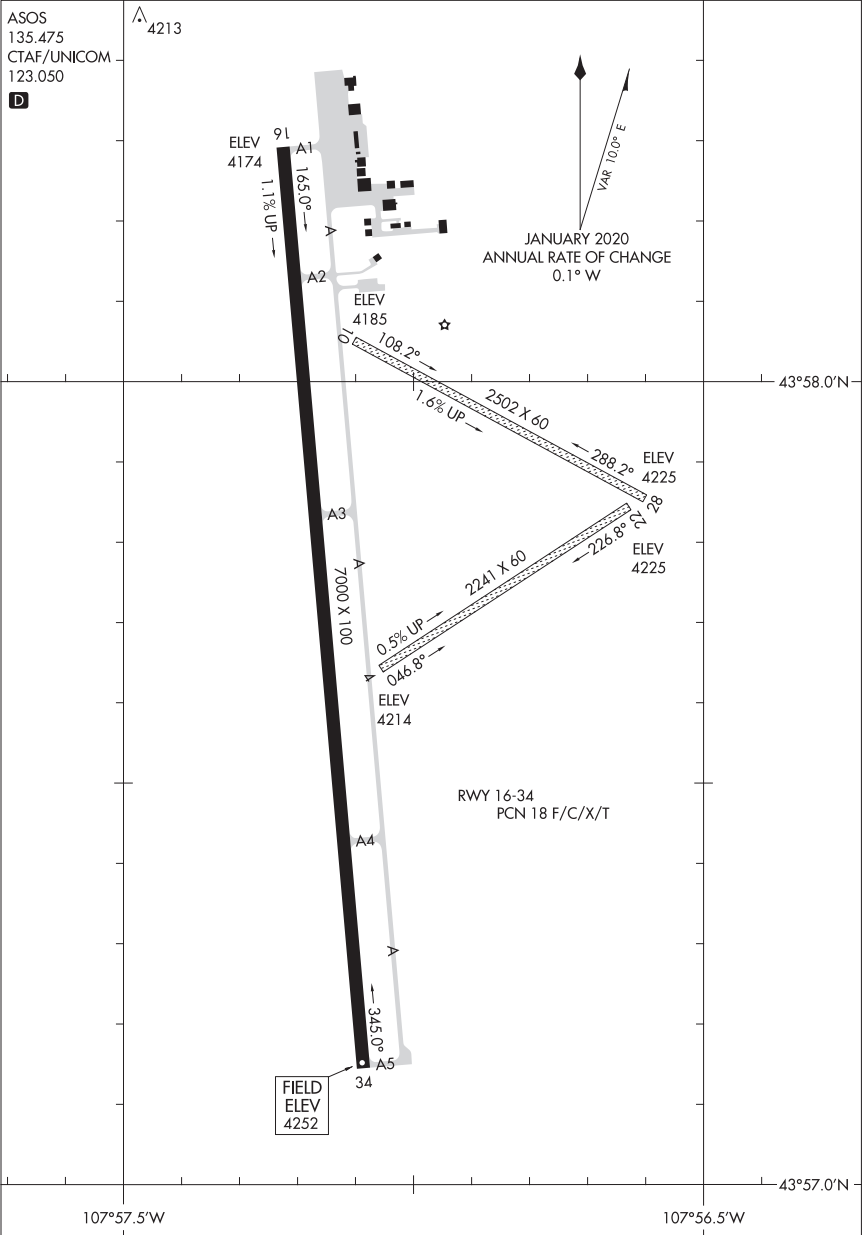
WOLF POINT, MONTANA  
L M CLAYTON (OLF)

20086

AIRPORT DIAGRAM

AL-801 (FAA)

WORLAND MUNI (WRL)  
WORLAND, WYOMING



AIRPORT DIAGRAM

20086

WORLAND, WYOMING  
WORLAND MUNI (WRL)

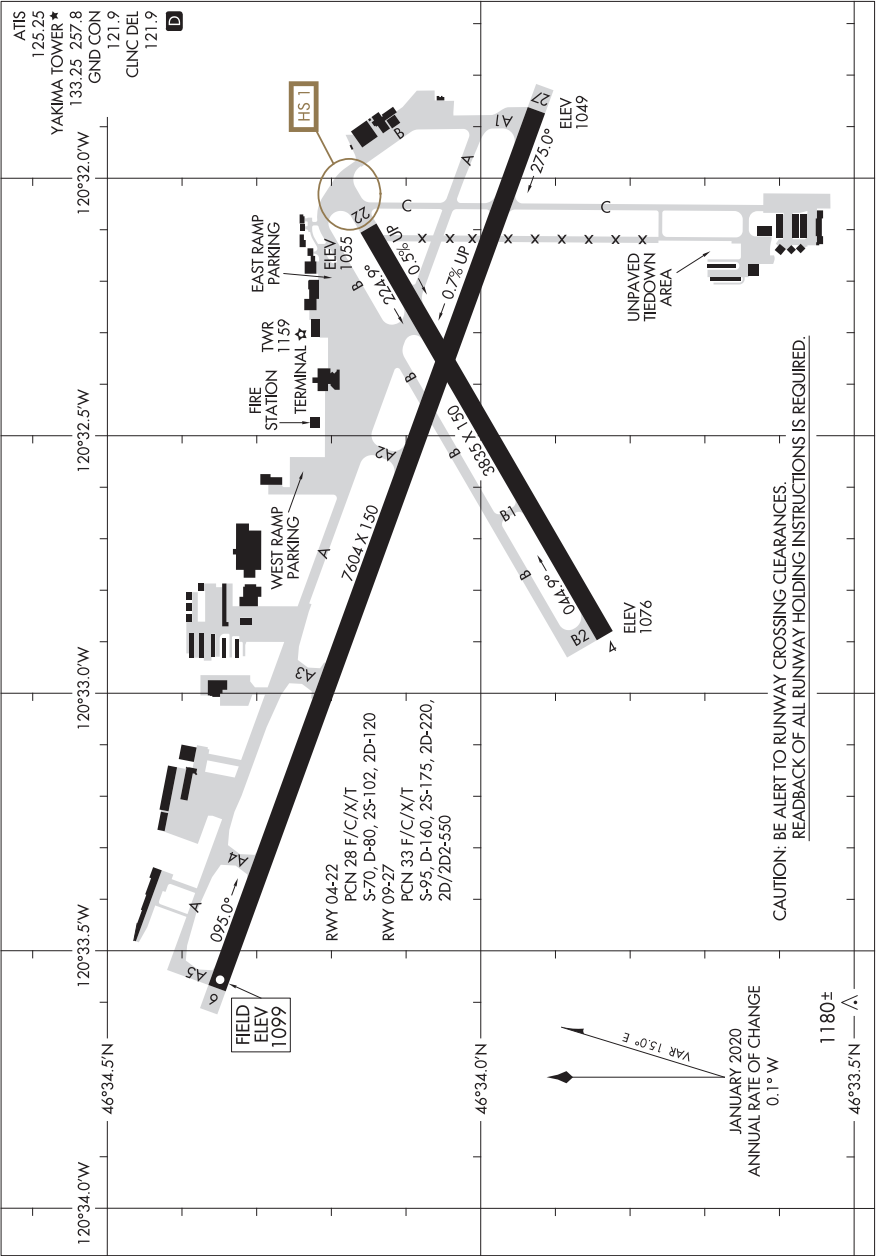
23110

AIRPORT DIAGRAM

YAKIMA AIR TRML/MCALLISTER FLD (YKM)

AL-465 (FAA)

YAKIMA, WASHINGTON



AIRPORT DIAGRAM

23110

YAKIMA AIR TRML/MCALLISTER FLD (YKM)

YAKIMA, WASHINGTON

### Submitting Pilot Weather Reports (PIREPs)

#### 1. UA - Routine PIREP / UUA - Urgent PIREP

#### 2. /OV - Location: Use Airport or NAVAID identifiers only.

- Location can be reported as a single fix, radial DME, or a route segment (Fix- Fix)

**Examples:** /OV LAX, /OV LAX-SLI120005, /OV PDZ-PSP.

#### 3. /TM - Time: When conditions occurred or were encountered.

- Use 4 digits in UTC.

**Examples:** /TM 1645, /TM 0915

#### 4. /FL - Altitude/Flight Level

- Use 3 digits for hundreds of feet. If not known, use UNKN.

**Examples:** /FL095, /FL310, /FLUNKN

#### 5. /TP - Type aircraft: Required if reporting Turbulence or Icing

- No more than 4 characters, use UNKN if the type is not known.

**Examples:** /TP P28A, /TP RV8, /TP B738, /TP UNKN

#### 6. /SK - Sky Condition/Cloud layers:

- Report cloud coverage using contractions: FEW, SCT, BKN, OVC, SKC
- Report bases in hundreds of feet: BKN005, SCT015, OVC200
- If bases are unknown, use UNKN
- Report cloud tops in hundreds of feet: TOP120

**Examples:** /SK BKN035, /SK SCT UNKN-TOP125, /SK OVC095-TOP125/ SKC

#### 7. /WX - Weather: Flight visibility is always reported first. Append FV reported with SM.

- Report visibility using 2 digits: FV01SM, FV10SM
- Unrestricted visibility use FV99SM.
- Use standard weather contractions e.g.: RA, SH, TS, HZ, FG, -, +

**Examples:** /WX FV01SM +SHRA, /WX FV10 SM -RA BR.

#### 8. /TA - Air temperature (Celsius): Required when reporting icing

- 2 digits, unless below zero, then prefix digits with M.

**Examples:** /TA 15, /TA 04 /TA M06

#### 9. /WV - Wind: Direction in 3 digits, speed in 3 or 4 digits, followed by KT.

**Examples:** /WV 270045KT, /WV 080110KT

#### 10. /TB - Turbulence:

- Report intensity using LGT, MOD, SEV, or EXTRM
- Report duration using INTMT, OCNL or CONS when reported by pilot.
- Report type using CAT or CHOP when reported by pilot.
- Include altitude only if different from /FL.
- Use ABV or BLO when limits are not defined.
- Use NEG if turbulence is not encountered.

**Examples:** /TB OCNL MOD, /TB LGT CHOP, /LGT 060, /TB MOD BLO 090, /TB NEG

#### 11. /IC - Icing:

- Report intensity using TRACE, LGT, MOD or SEV
- Report type using RIME, CLR, or MX
- Include altitude only if different than /FL.
- Use NEG if icing not encountered.

**Examples:** /IC LGT-MOD RIME, /IC SEV CLR 028-045, /IC NEG

#### 12. /RM - Remarks: Use to report phenomena that does not fit in any other field.

- Report the most hazardous element first.
- Name of geographic location from /OV field fix.

**Examples:** /RM LLWS +/-15KT SFC-003 DURC RWY22 JFK

/RM MTN WAVE, /RM DURC, /RM DURD, /RM MULLAN PASS

/RM BA RWY 02L BA MEDIUM TO POOR 3IN DRY SN OVER COMPACTED

SN

#### Examples of Completed PIREPS

UA /OV RFD /TM 1315 /FL160 /TP PA44 /SK OVC025-TOP095/OVC150 /TA M12 /TB INTMT LGT CHOP

UA /OV DHT360015-AMA /TM 2116 /FL050 /TP PA32 /SK BKN090 /WX FV05SM -RA /TA 04 /TB LGT /IC NEG

UUA /OV PDZ010018 /TM 1520 /FL125 /TP C172 /WV 270048KT TB SEV 055-085 /RM CAJON PASS

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# PIREP FORM

3 or 4 letter Identifier	
1. UA UUA	
	Routine Urgent
2. /OV	Location
3. /TM	Time
4. /FL	Altitude/Flight Level
5. /TP	Aircraft Type
Items 1 through 5 are mandatory for all PIREPs	
6. /SK	Sky Condition
7. /WX	Flight Visibility & Weather
8. /TA	Temperature (Celsius)
9. /WV	Wind
10. /TB	Turbulence
11. /IC	Icing
12. /RM	Remarks

FAA Form 7110-2 (9/19) Supersedes Previous Edition